

**Iowa Department of Natural Resources
Title V Operating Permit**

**Name of Permitted Facility: Minnesota Mining & Manufacturing
(3M)**

Facility Location: 3406 E. Pleasant Street, Knoxville, Iowa

Air Quality Operating Permit Number: 01-TV-025

Expiration Date: October 16, 2006

EIQ Number: 92-3629

Facility File Number: 63-01-001

Responsible Official

Name: L.C. Johnson

Title: Plant Manager

Mailing Address: 3406 E. Pleasant Street Knoxville, Iowa 50138

Phone #: 515-828-7000

Permit Contact Person for the Facility

Name: Harlan Petty

Title: Technical Manager

Mailing Address: 3406 E. Pleasant Street, Knoxville, Iowa 50138

Phone #: 515-828-7000

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
CFR	Code of Federal Regulation
CO	carbon monoxide
EIQ	emissions inventory questionnaire
°F	degrees Fahrenheit
gr./100 cf	grains per one hundred cubic feet
gr./dscf.....	grains per dry standard cubic foot
HAP	hazardous air pollutant
IAC	Iowa Administrative Code
IDNR	Iowa Department of Natural Resources
KCF/hr.....	thousand cubic feet per hour
KW	kilowatts per hour
MMCF/hr	million cubic feet per hour
MVAC.....	motor vehicle air conditioner
NSPS	new source performance standard
PM	particulate matter (equivalent to TSP, total suspended particulate)
PM ₁₀	particulate matter ten microns and less in diameter
lb./hr.	pounds per hour
lb./MMBtu.....	pounds per million British thermal units
ppmv.....	parts per million by volume
scfm	standard cubic feet per minute
TPY	tons per year
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

Pollutants

PM ₁₀	particulate matter ten microns and less in diameter
PM	particulate matter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC	volatile organic compounds
CO	carbon monoxides
HAP	hazardous air pollutants

I. Facility Description and Equipment List

Facility Name: Minnesota Mining & Manufacturing (3M)

Permit Number: 01-TV-025

Facility Description: Tape Manufacturing

Equipment List

Emission Point Number	Associated Emission Unit Number	Associated Emission Unit Description
002-015	GEN 002	Emergency Generator
003-003	Poly 1	Reactor 1
	Poly 2	Reactor 2
003-020	Poly 1	Reactor 1
	Poly 2	Reactor 2
003-051	Poly 1	Reactor 1
	Poly 2	Reactor 2
003-064	9NFT	Flame Treater
003-074	9NIO	9N Inert Oven Bypass
003-078	DIE CLEAN	Die Cleaning
003-079	9NHMC	Coater
003-080	L1MO	Resin Storage Tank
	M1T1	Resin Storage Tank
	S1T1	Resin Storage Tank
	N1MO	Molten Antioxidants Tank (35 Gallon)
	Mixer	Mixer
	S1G1	Resin Melter
003-081	9NHMC	Coater
003-095	9NS1	Adhesive Coater
003-097	B1	Blend Tank (2878 gallons)
	B2	Blend Tank (2878 gallons)
	VP Silo	VP Silo
	BX	Premix Tank (50 gallons)
	BH	Premix Tank (50 gallons)
	BI	Premix Tank (50 gallons)
	FX	Storage Tank (30 gallons)
	FH	Storage Tank (30 gallons)
	FI	Storage Tank (50 gallons)
	FIOA	Isopropyl Alcohol Tank (200 gallons)
	FAA	Acrylic Acid Tank (50 gallons)
	BM	Storage Tank (10 gallons)
	M1	Mixer
	M2	Mixer

Equipment List Cont'd

003-097	M3	Mixer
	S1	Batch Storage Mix Tank (2878 gallons)
	S2	Batch Storage Mix Tank (3886 gallons)
	S3	Batch Storage Mix Tank (3886 gallons)
	S4	Batch Storage Mix Tank (3886 gallons)
	S5	Batch Storage Mix Tank (2878 gallons)
	S6	Batch Storage Mix Tank (2878 gallons)
	S7	Batch Storage Mix Tank (1250 gallons)
	8NC R1	Coating Tank (25 gallons)
	8NC R2	Storage Tank (30 gallons)
	SURGE1	Adhesive Mix Tank (137 gallons)
	SURGE2	Adhesive Mix Tank (137 gallons)
	SURGE3	Adhesive Mix Tank (137 gallons)
	SURGE4	Adhesive Mix Tank (100 gallons)
	SURGE5	Adhesive Mix Tank (100 gallons)
	FLUSH1	Adhesive and IOA Flush Tank (100 gallons)
	FLUSH2	Adhesive and IOA Flush Tank (100 gallons)
	SURGE 6	Adhesive Mix Tank (100 gallons)
003-108	9NS1	9N Area Vent
004-004	1NS1	Coater
	1ND1	Dryer
004-005	1NO	1N Bypass Stack
	1ND2	1N Bypass Stack
004-006	2NAD1	2N Bypass Stack
	2NAD2	2N Bypass Stack
	2NBO	2N Bypass Stack
	2NBD	2N Bypass Stack
004-007	2NAS1	Coater Fugitive
	2NAS2	Coater Fugitive
	2NAS3	Coater Fugitive
004-008	1NS1	Coater Fugitive
	1NS2	Coater Fugitive
	1NS3	Coater Fugitive
	5NS1	Coater Fugitive
	5NS2A	Coater Fugitive
	5NS2B	Coater Fugitive
	6NS1	Coater Fugitive
	8NS1	Coater Fugitive
	Tank 11	Adhesive Storage Tank
004-009	2NBS1	Coater Fugitive
	Tank 3	Storage Tank
004-010	Tank4	Adhesive Storage Tank
004-011	Tank5	Adhesive Storage Tank

Equipment List Cont'd

004-012	5NO1	Dryer (5N/6N Bypass Stack)
	5NO2	Dryer (5N/6N Bypass Stack)
	6ND	Coater (5N/6N Bypass Stack)
004-013	5NCT	Corona Treater
004-015	6NS2	Coater
004-017	6NCT	Corona Treater
004-018	1NADH	Hold Tank - Fugitive
	5NTANK1	Mix Tank (Indoor Fugitive)
	FC3	Mix Tank (Indoor Fugitive)
	FC4	Mix Tank (Indoor Fugitive)
	DB3&4	Mix Tank (Indoor Fugitive)
	SI1	Mix Tank (Indoor Fugitive)
	SI2	Mix Tank (Indoor Fugitive)
	IPA	Mix Tank (Indoor Fugitive)
004-029	2NBS3	Coater & Die Cleaner
004-031	6Nchamber	Oven
004-034	6Nchamber	Oven Bypass Stack
004-042	9NRC	Spray Coating Booth
004-047	6NSEQUR	Web Seal Exhaust
004-055	Tank 1	Adhesive Storage Tank
004-056	Tank 2	Adhesive Storage Tank
004-057	Tank 6	Adhesive Storage Tank
004-060	Tank 8	Adhesive Storage Tank
004-061	Tank 7	Adhesive Storage Tank
004-064	8N	Cure Chamber
004-065	8NCT	Corona Treater
004-067	6NS1	Coating Chamber
004-069	8NS1	Coater
004-071	8NC	Coater
004-072	8NC	Coater
004-076	8NC R1	Coating Tank (25 gallons)
	8NC R2	Storage Tank (30 gallons)
004-077	Tank 10	Solvent Storage Tank
004-078	Tank 9	Solvent Storage Tank
004-079	6N Enclose	Coater
004-080	8NC	Coater
004-081	8N Enclose	Coater
004-088		
004-082	8NS1	Coater
	8NC	Coater
	6NS1	Coating Chamber
004-085	2NB ADH	Adhesive Storage Tank
004-118	Die Cleaning & Tank	Degreasing System
004-120	04-1NAM-A-05	Adhesive Storage Tank

Equipment List Cont'd

Emission Point Number	Associated Emission Unit Number	Associated Emission Unit Description
005-007	CR1DM	Solvent Mixing
005-008	Resin Dumper	Resin Dumper
005-014	CR3 3S	Resin Blending
005-018	Mch 01	Rubber Mixing
005-028	Mch 09	Powder Mixer
005-034	Mch 02	Rubber Mixing
005-045	CR2 2S	Solvent/Rubber/Resin Blender
005-046	CR2 2N	Solvent/Rubber/Resin Blender
005-047	CR1 MT1	Solvent/Resin Mix Tank
005-048	CR1MT2	Solvent/Resin Mix Tank
005-049	CR1HT1	Solvent Hold Tank
005-050	CR1 HT2	Solvent Tank
007-001	2NAD1	Dryer
	2NAD2	Dryer
	1ND2	Coater
007-004	2NBO	Dryer
	2NBD	Dryer
	5N01	Dryer
	5N02	Dryer
	F1	Fume Incinerator
007-030	Boiler 1	Boiler 1 (72 MMBtu/hr)
007-031	Boiler 2	Boiler 2 (72 MMBtu/hr)
007-032	GEN 007	Generator
007-059	Boiler 3	Boiler 3 (144 MMBtu/hr)
008-002	GEN 008	Generator
010-001	Tank 1	Solvent Storage Tank
010-002	Tank 2	Solvent Storage Tank
010-003	Tank 3	Solvent Storage Tank
010-004	Tank 4	Solvent Storage Tank
010-005	Tank 5	Solvent Storage Tank
010-006	Tank 6	Solvent Storage Tank
010-007	Tank 7	Solvent Storage Tank
010-008	Tank 8	Solvent Storage Tank
010-011	Tank 11	Solvent Storage Tank
010-012	Tank 12	Solvent Storage Tank
010-013	Tank 13	Solvent Storage Tank
010-018	Tank 18	Storage Tank
019-002	7NS1	Coater
019-003	7NC	Coater
019-004	7NC	Coater
019-005	7NC	Coater

Equipment List Cont'd

Emission Point Number	Associated Emission Unit Number	Associated Emission Unit Description
019-006	13JE	Extruder Machine
019-007	14JE	Extruder Machine
019-008	14JCT	Corona Treater
019-012	7NDL1	Delaminator
019-013	7NDM	Drum Pump & Mixing
019-033	Core Tank 1	Adhesive Tank
	Core Tank 2	Adhesive Tank
	Pigment Tank	Pigment Tank
019-065	13JCT	Corona Treater
022-001	AATNK	Acrylic Acid Tank
024-003	1NO	Drier / Coater
024-004	1NO	Drier / Coater

Insignificant Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
L2	Process Oil Tank (150 Gallon)
R1 S,D, & W	Rubber Pellet Storage, Drop, & Weight Tank
R2 S,D, & W	Rubber Pellet Storage, Drop, & Weight Tank
5N Tank 2	Solvent Tank (165 Gallon)
5N Tank 3	Solvent Tank (35 Gallon)
CM Drums	Coating Mixed in 55 Gallon Drums
D9N	Coating Mixed in 55 Gallon Drums
DB1 & DB2	Water Based Adhesive Tanks
6NVP	Vacuum Pull Roll
Tank 10 (010-010A01)	Isooctyl Acrylate Tank (60,000 Gallon)
Tank 013-001	No. 6 Fuel Oil Tank (500,000 Gallon)
Pigment	Pigment Tank (65 Gallon)
7N SURF	Coating Ingredient Storage Tank (130 Gallon)
Pump House Boiler	Natural Gas Boiler (2.2 MMBtu/hr)
Fuel Oil Tank (007-053)	Fuel Oil Tank (300 Gallon)
Fuel Oil Tank (008-006)	Fuel Oil Tank (300 Gallon)
Fuel Oil Tank (002-016)	Fuel Oil Tank (500 Gallon)
Yard Tractor Fuel (009-099)	Diesel Fuel Tank (300 Gallon)

II. Plant-Wide Conditions

Facility Name: Minnesota Mining & Manufacturing (3M)
Permit Number: 01-TV-025

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 years
Commencing on: October 17, 2001
Ending on: October 16, 2006

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

SO₂: 500 parts per million by volume, except as provided in 567 IAC Chapter 23.3(3) "e"

Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter: No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I (As found in 567 IAC 23.3(2)"a", or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B)).

Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking

reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

NSPS Requirements

The entire 8N line is subject to the NSPS subpart RR because all of the processes (8N-1 through 8N-6) are located between the wind and rewind reels. NSPS subpart RR applies for all stacks within 8N line. The entire 8N line is also subject to the above mentioned Plant-Wide Conditions.

The permittee is responsible for ensuring that this entire coating operation follow all of the regulations specified in 40 CFR 60 subpart RR. These conditions include, but are not limited to :

- The permittee must obtain a minimum of a 90% VOC reduction calculated over one calendar month. After the performance test, the overall VOC reduction must be greater than or equal to the overall VOC reduction obtained during the initial compliance test. Instead of the above standard, the permittee may demonstrate that no more than 0.2 pounds of VOC is emitted per pound of solids applied.
- If the thermal oxidizer is used, a temperature measuring device must be installed, calibrated, and maintained, which will measure the combustion temperature and the exhaust gas temperature at the point of discharge from the thermal oxidizer to the stack. During operation the combustion temperature of the thermal oxidizer, with the exception of process start-ups or shutdowns, shall be maintained at a minimum of within 50 degrees F of the temperature recorded during the most recent performance test. The facility shall record and report all 3-

hour periods when the combustion temperature drops more than 50 °F below the temperature measured during the most recent performance test.

1) The following calculations must be performed as specified in 40 CFR 60 subpart RR: The permittee must calculate a weighted average of the mass of solvents (or VOC emitted), per mass of coating solids applied in this operation. This must be done according to the procedures found in subpart RR, 60.443a(2) as follows:

$$G = \frac{\sum_{i=1}^n W_{ai} M_{ci}}{\sum_{i=1}^n W_{si} M_{ci}}$$

Where:

G = the calculated weighted average mass (lb.) of VOC per mass (lb.) of coating solids applied each calendar month

W_{ai} = the weight fraction of organics applied of each coating (i) applied during a calendar month as determined from Reference Method 24 or coating manufacturer's data.

W_{si} = the weight fraction of solids applied of each coating (i) applied during a calendar month as determined from Reference Method 24 or coating manufacturer's data.

M_{ci} = the total mass (lb.) of each coating (i) applied during a calendar month as determined from facility records.

For each affected facility where the value of G is less than or equal to 0.20 lb. of VOC per lb. of coating solids applied, the affected facility is in compliance with 40 CFR §60.442(a)(1)

40 CFR §60.442(b): To determine compliance with 40 CFR §60.442(a)(2), the owner or operator shall calculate the required overall V emission reduction according to the following equation:

$$R_q = \frac{G - 0.20}{G} \times 100$$

If R_q is less than or equal to 90 percent, then the required overall VOC emission reduction is R_q . If R_q is greater than 90 percent, then the required overall VOC emission reduction is 90 percent.

40 CFR §60.442(d): Where compliance with the emission limit specified in Sec. 60.442(a)(2) is achieved through the use of a solvent destruction device, the owner or operator shall determine calendar monthly

compliance by comparing the monthly required overall VOC emission reduction specified in paragraph (b)(1) of this section to the overall VOC emission reduction demonstrated in the most recent performance test which complied with Sec. 60.442(a)(2). If the monthly required overall VOC emission reduction is less than or equal to the overall VOC reduction of the most recent performance test, the affected facility is in compliance with Sec. 60.442(a)(2).

40 CFR §60.442(e): Where compliance with Sec. 60.442(a)(2) is achieved through the use of a solvent destruction device, the owner or operator shall continuously record the destruction device combustion temperature during coating operations for thermal incineration destruction devices or

the gas temperature upstream and downstream of the incinerator catalyst bed during coating operations for catalytic incineration destruction devices. For thermal incineration destruction devices the owner or operator shall record all 3-hour periods (during actual coating operations) during which the average temperature of the device is more than 28 deg.C (50 deg.F) below the average temperature of the device during the most recent performance test complying with Sec. 60.442(a)(2). For catalytic incineration destruction devices, the owner or operator shall record all 3-hour periods (during actual coating operations) during which the average temperature of the device immediately before the catalyst bed is more than 38 deg.C (50 deg.F) below the average temperature of the device during the most recent performance test complying with Sec. 60.442(a)(2), and all 3-hour periods (during actual coating operations) during which the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference of the device during the most recent performance test complying with Sec. 60.442(a)(2).

- 2) The following records must be kept, as specified in 40 CFR 60.445 subpart RR, which show the following. All required quantities must be averaged (rolling average) on a monthly basis.
 - a) Quantity of each solvent (VOC) and solid used in this coating line.
 - b) All calculations performed
 - c) Combustion temperature of the thermal oxidizer and the exhaust gas temperature prior to gasses discharging from oxidizer to stack (if used).

Quarterly records must be kept and sent to the Department which show any exceedances in the VOC emission limits. If no exceedances occur, the records must state this and must be sent in semi-annually.

Based on the information supplied by the facility, every attempt has been made to include the applicable requirements of 40 CFR 60 subpart RR. The owner / operator shall refer to the section to determine if any additional requirements apply.

Authority for Requirement: Iowa DNR Construction Permit(s): 92-A-652-S4, 92-A-653-S4, 92-A-654-S2, 92-A-655-S3, 94-A-545-S2, 01-A-839, 01-A-840, 01-A-841, and 01-A-869
40 CFR 60 subpart RR

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, 3M is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, 3M shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

III. Emission Point-Specific Conditions

Facility Name: Minnesota Mining & Manufacturing (3M)

Permit Number: **01-TV-025**

Emission Point ID Number: 002-015

Associated Equipment

Associated Emission Unit ID Numbers : GEN 002

Applicable Requirements

Emission Unit vented through this Emission Point: GEN 002

Emission Unit Description: Emergency Generator

Raw Material/Fuel: Diesel Fuel Oil

Rated Capacity: 400 Hp, (1.02 MMBtu/hr)

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 99-A-219

⁽¹⁾If emissions above the indicator opacity (25%) are observed other than at start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter

Emission Limit(s): 0.31 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 99-A-219

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"

Iowa DNR Construction Permit 99-A-219

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of operation: This generator shall not be operated more than 500 hours per rolling twelve-month period.

Authority for Requirement: Iowa DNR Construction Permit 99-A-219

Process throughput:

- This emission unit shall combust number 1 (or number 2) fuel oil with a sulfur content that does not exceed 0.5 percent.

Authority for Requirement: Iowa DNR Construction Permit 99-A-219
567 IAC 23.3(3)"b"

- The facility shall monitor the percent of sulfur in the fuel as delivered to accurately track the SO_x emissions. The amount of fuel purchased and the sulfur content shall be used to calculate the overall sulfur content of all the fuel as combusted on a rolling twelve month average. The sulfur content shall be used to calculate the actual SO_x emissions. The sulfur content can be vendor supplied or facility generated.

Authority for Requirement: Iowa DNR Construction Permit 99-A-219

Reporting and Recordkeeping: Records shall be kept on-site for at least five years and shall indicate the following:

- Record the hours this generator operates per month. Calculate rolling twelve-month totals.

Authority for Requirement: Iowa DNR Construction Permit 99-A-219

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 32

Stack Diameter (inches): 6

Stack Exhaust Flow Rate (scfm): 2960

Stack Temperature (°F): 755

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 99-A-219

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 003-064

Associated Equipment

Associated Emission Unit ID Numbers : 9NFT

Applicable Requirements

Emission Unit vented through this Emission Point: 9NFT

Emission Unit Description: Flame Treater

Raw Material/Fuel: Natural Gas

Rated Capacity: 2 burners, each rated at 0.4 MMBTU/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv, except as provided in 567 IAC Chapter 23.3(3) "e"

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: VOCs

Emission Limit(s): 139.8 lb./hr., 612 TPY

The emission standards are variable. These limits represent the maximum possible allowable emissions based on NSPS Subpart RR and the equipment capacity for the entire 9N line.

Authority for Requirement: Iowa DNR Construction Permit 93-A-139-S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput: This unit shall burn natural gas only.

Authority for Requirement: 567 IAC 22.108(3)

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

The following conditions are for the entire 9N coating line, permits 93-A-139-S4 through 93-A-143-S4 and 98-A-626.

- A. The maximum application rate for the 9N coating line 58.5 lb solids/minute and 23.3 lb VOC/min.
- B. The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations.

These conditions include, but are not limited to:

- a) The owner or operator must comply with at least one of the following standards:
 - 1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
 - 2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.
 - 3. The standard specified in 40 CFR 60.443(b), calculated over one calendar month, and the construction permit emission limits must not be exceeded.
- b) A temperature measuring device must be properly installed, calibrated and maintained according to specifications, which will measure the thermal oxidizer combustion temperature and the temperature of the exhaust gases before they reach the stack. The combustion temperature of the thermal oxidizer, with the exception of process start-ups and shutdowns, must be maintained at a minimum of 1400 degrees Fahrenheit during operation. This permit condition, B(b), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.
- c) For the solvent recovery system connected to the oven, the owner or operator must properly install, calibrate and maintain a monitoring device for indicating the cumulative amounts of solvents recovered by the device over a calendar month period.

- C. For this emission point only, emissions must be exclusively the natural gas combustion products from the treater.

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits for the entire 9N line.

- A. The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B. The owner or operator must calculate the overall monthly VOC reduction and compare it to the VOC reduction obtained in the initial performance test. This must be done by calculating the monthly average of the quantity of VOCs used vs. VOCs emitted, as required in 40 CFR 60.443 and 60.444.
- C. The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
- a) Quantity of each solvent (VOC) and solid used in this coating line.
 - b) All calculations performed.
 - c) Combustion temperature of the thermal oxidizer and the temperature of the exhaust gas prior to entering the stack. This permit condition, C(c), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.

Authority for Requirement: Iowa DNR Construction Permit 93-A-139-S4

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 42

Stack Diameter (inches): 15.5

Stack Exhaust Flow Rate (scfm): 5500

Stack Temperature (°F): 150

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 93-A139-S4

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

No opacity monitoring required at this time.

No stack testing required at this time.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 003-074 (Emergency Bypass for 9N Inert Oven)

Associated Equipment

Associated Emission Unit ID Numbers : 9NIO

Applicable Requirements

Emission Unit vented through this Emission Point: 9NIO

Emission Unit Description: Inert Oven

Raw Material/Fuel: Adhesive

Rated Capacity: 1398 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 139.8 lb./hr., 612 TPY

The emission standards are variable. These limits represent the maximum possible allowable emissions based on NSPS Subpart RR and the equipment capacity for the entire 9N line.

Authority for Requirement: Iowa DNR Construction Permit 93-A-141S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard, which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

The following conditions are for the entire 9N coating line, permits 93-A-139-S4 through 93-A-143-S4 and 98-A-626.

- A. The maximum application rate for the 9N coating line is 58.5 lb solids/minute and 23.3 lb VOC/minute.
- B. The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:
 - a) The owner or operator must comply with at least one of the following standards:
 - 1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
 - 2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.
 - 3. The standard specified in 40 CFR 60.443(b), calculated over one calendar month, and the construction permit emission limits must not be exceeded.
 - b) A temperature measuring device must be properly installed, calibrated and maintained according to specifications, which will measure the thermal oxidizer combustion temperature and the temperature of the exhaust gases before they reach the stack. The combustion temperature of the thermal oxidizer, with the exception of process start-ups and shutdowns, must be maintained at a minimum of 1400 degrees Fahrenheit during operation. This permit condition, B(b), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.
 - c) For the solvent recovery system connected to the oven, the owner or operator must properly install, calibrate and maintain a monitoring device for indicating the cumulative amounts of solvents recovered by the device over a calendar month period.

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits for the entire 9N line.

- A. The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B. The owner or operator must calculate the overall monthly VOC reduction and compare it to the VOC reduction obtained in the initial performance test. This must be done by calculating the monthly average of the quantity of VOCs used vs. VOCs emitted, as required in 40 CFR 60.443 and 60.444.

- C. The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
- a) Quantity of each solvent (VOC) and solid used in this coating line.
 - b) All calculations performed.
 - c) Combustion temperature of the thermal oxidizer and the temperature of the exhaust gas prior to entering the stack. This permit condition, C(c), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.

Authority for Requirement: Iowa DNR Construction Permit 93-A-141S4

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 54

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (acfm): 1,000

Stack Temperature (°F): 200

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 93-A-141S4

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Refer to Emission Point 003-095 for 9N Inert Oven Operation and Maintenance Plan.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 003-078

Associated Equipment

Associated Emission Unit ID Numbers: DIE CLEAN

Applicable Requirements

Emission Unit vented through this Emission Point: DIE CLEAN

Emission Unit Description: Die Cleaning

Raw Material/Fuel: Paraffin Wax

Rated Capacity: 6.0 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Authority for Requirement: Iowa DNR Construction Permit 93-A-144

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

No operating limits are applicable at this time.

Authority for Requirement: Iowa DNR Construction Permit 93-A-144

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 12.5

Stack Diameter (inches): 14.5

Stack Exhaust Flow Rate (scfm): 1000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 93-A-144

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 003-079

Associated Equipment

Associated Emission Unit ID Numbers: 9N HMC

Applicable Requirements

Emission Unit vented through this Emission Point: 9N HMC

Emission Unit Description: Coater

Raw Material/Fuel: Rubber/Resin

Rated Capacity: 3510 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOCs

Emission Limit(s): 139.8 lb./hr., 612 TPY

These limits represent the maximum possible allowable emissions based on NSPS Subpart RR and the equipment capacity for the entire 9N line.

Authority for Requirement: Iowa DNR Construction Permit 93-A-142-S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

The following conditions are for the entire 9N coating line, permits 93-A-139-S4 through 93-A-143-S4 and 98-A-626.

- A. The maximum application rate for the 9N coating line 58.5 lb solids/minute and 23.3 lb VOC/min.
- B. The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:
 - a) The owner or operator must comply with at least one of the following standards:
 - 1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
 - 2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.
 - 3. The standard specified in 40 CFR 60.443(b), calculated over one calendar month, and the construction permit emission limits must not be exceeded.
 - b) A temperature measuring device must be properly installed, calibrated and maintained according to specifications, which will measure the thermal oxidizer combustion temperature and the temperature of the exhaust gases before they reach the stack. The combustion temperature of the thermal oxidizer, with the exception of process start-ups and shutdowns, must be maintained at a minimum of 1400 degrees Fahrenheit during operation. This permit condition, B(b), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.
 - c) For the solvent recovery system connected to the oven, the owner or operator must properly install, calibrate and maintain a monitoring device for indicating the cumulative amounts of solvents recovered by the device over a calendar month period.

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits for the entire 9N line.

- A. The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B. The owner or operator must calculate the overall monthly VOC reduction and compare it to the VOC reduction obtained in the initial performance test. This must be done by calculating the monthly average of the quantity of VOCs used vs. VOCs emitted, as required in 40 CFR 60.443 and 60.444.
- C. The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
 - a) Quantity of each solvent (VOC) and solid used in this coating line.
 - b) All calculations performed.
 - c) Combustion temperature of the thermal oxidizer and the temperature of the exhaust gas prior to entering the stack. This permit condition, C(c), only applies when the thermal oxidizer is being used to demonstrate compliance

with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.

Authority for Requirement: Iowa DNR Construction Permit 93-A-142-S4

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 43.5

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (scfm): 800

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 93-A-142-S4

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 003-080

Associated Equipment

Associated Emission Unit ID Numbers: L1MO, M1T1, S1T1, N1MO, S1G1, and MIXER

Applicable Requirements

Emission Unit vented through this Emission Point: L1MO

Emission Unit Description: Storage Tank

Raw Material/Fuel: Liquid Resin

Rated Capacity: 500 gallon capacity, 342 lb./hr.

Emission Unit vented through this Emission Point: M1T1

Emission Unit Description: Storage Tank

Raw Material/Fuel: Liquid Resin

Rated Capacity: 1000 gallon capacity, 2000 lb./hr.

Emission Unit vented through this Emission Point: S1T1

Emission Unit Description: Storage Tank

Raw Material/Fuel: Liquid Resin

Rated Capacity: 1000 gallon capacity, 2000 lb./hr.

Emission Unit vented through this Emission Point: N1MO

Emission Unit Description: Molten Antioxidants Tank (35 Gallon)

Raw Material/Fuel: Antioxidants

Rated Capacity: 35 gallon capacity

Emission Unit vented through this Emission Point: S1G1

Emission Unit Description: Resin Melter

Raw Material/Fuel: Resin

Rated Capacity: 1300 lb./hr.

Emission Unit vented through this Emission Point: MIXER

Emission Unit Description: Mixer

Raw Material/Fuel: Resin, Rubber, and Antioxidants

Rated Capacity: 3000 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No Applicable Requirements per Iowa DNR Construction Permit 93-A-146, 93-A-147, 93-A-148, and 93-A-149

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 003-081**Associated Equipment**

Associated Emission Unit ID Numbers : 9NHMC

Applicable Requirements

Emission Unit vented through this Emission Point: 9NHMC

Emission Unit Description: Coater

Raw Material/Fuel: Rubber/Resin

Rated Capacity: 3500 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 139.8 lb./hr., 612 TPY

The emission standards are variable. These limits represent the maximum possible allowable emissions based on NSPS Subpart RR and the equipment capacity for the entire 9N line.

Authority for Requirement: Iowa DNR Construction Permit 93-A-143S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

The following conditions are for the entire 9N coating line, permits 93-A-139-S4 through 93-A-143-S4 and 98-A-626.

- A. The maximum application rate for the 9N coating line 58.5 lb solids/minute and 23.3 lb VOC/minute.
- B. The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:
 - a) The owner or operator must comply with at least one of the following standards:
 - 1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
 - 2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.
 - 3. The standard specified in 40 CFR 60.443(b), calculated over one calendar month, and the construction permit emission limits must not be exceeded.
 - b) A temperature measuring device must be properly installed, calibrated and maintained according to specifications, which will measure the thermal oxidizer combustion temperature and the temperature of the exhaust gases before they reach the stack. The combustion temperature of the thermal oxidizer, with the exception of process start-ups and shutdowns, must be maintained at a minimum of 1400 degrees Fahrenheit during operation. This permit condition, B(b), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.
 - c) For the solvent recovery system connected to the oven, the owner or operator must properly install, calibrate and maintain a monitoring device for indicating the cumulative amounts of solvents recovered by the device over a calendar month period.

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits for the entire 9N line.

- A. The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B. The owner or operator must calculate the overall monthly VOC reduction and compare it to the VOC reduction obtained in the initial performance test. This must be done by calculating the monthly average of the quantity of VOCs used vs. VOCs emitted, as required in 40 CFR 60.443 and 60.444.
- C. The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
 - a) Quantity of each solvent (VOC) and solid used in this coating line.
 - b) All calculations performed.

- c) Combustion temperature of the thermal oxidizer and the temperature of the exhaust gas prior to entering the stack. This permit condition, C(c), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.

Authority for Requirement: Iowa DNR Construction Permit 93-A-143S4

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 46

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (scfm): 500

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 93-A-143S4

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 003-095**Associated Equipment**

Associated Emission Unit ID Numbers : 9NS1

Emissions Control Equipment ID Number: 9NTO and 9NIO

Emissions Control Equipment Description: Thermal Oxidizer and Inert Oven

Applicable Requirements

Emission Unit vented through this Emission Point: 9NS1

Emission Unit Description: Plastic Adhesive Coater

Raw Material/Fuel: Adhesive

Rated Capacity: 1398 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 139.8 lb./hr., 612 TPY

The emission standards are variable. These limits represent the maximum possible allowable emissions based on NSPS Subpart RR and the equipment capacity for the entire 9N line.

Authority for Requirement: Iowa DNR Construction Permit 93-A-140-S5

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve

compliance with an opacity standard or with a standard, which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

The following conditions are for the entire 9N coating line, permits 93-A-139-S4, 93-A-140-S5, 93-A-141-S4 through 93-A-143-S4 and 98-A-626.

- A. The maximum application rate for the 9N coating line 58.5 lb solids/minute and 23.3 lb VOC/minute.
- B. The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:
 - a) The owner or operator must comply with at least one of the following standards:
 - 1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
 - 2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.
 - 3. The standard specified in 40 CFR 60.443(b), calculated over one calendar month, and the emission limits in Condition 9 must not be exceeded.
 - b) A temperature measuring device must be properly installed, calibrated and maintained according to specifications, which will measure the thermal oxidizer combustion temperature and the temperature of the exhaust gases before they reach the stack. The combustion temperature of the thermal oxidizer, with the exception of process start-ups and shutdowns, must be maintained at a minimum of 1400 degrees Fahrenheit during operation. This permit condition, B(b), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.
 - c) For the solvent recovery system connected to the oven, the owner or operator must properly install, calibrate and maintain a monitoring device for indicating the cumulative amounts of solvents recovered by the device over a calendar month period.

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits for the entire 9N line.

- A. The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B. The owner or operator must calculate the overall monthly VOC reduction and compare it to the VOC reduction obtained in the initial performance test. This must be done by calculating the monthly average of the quantity of VOCs used vs. VOCs emitted, as required in 40 CFR 60.443 and 60.444.
- C. The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
 - a) Quantity of each solvent (VOC) and solid used in this coating line.
 - b) All calculations performed.

- c) Combustion temperature of the thermal oxidizer and the temperature of the exhaust gas prior to entering the stack. This permit condition, C(c), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.

Authority for Requirement: Iowa DNR Construction Permit 93-A-140-S5

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 15

Stack Diameter (inches): 22

Stack Exhaust Flow Rate (scfm): 6,500

Stack Temperature (°F): 200

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 93-A-140-S5

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: VOCs

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

9N Thermal Oxidizer and Inert Oven Operation and Maintenance Plans

The 9N Thermal Oxidizer and Inert Oven shall be operated and maintained according to this section and according to the plant's Standard Operating Procedure (SOP) MA-0138 and MA-0137, respectively. SOPs MA-0138 and MA-0137 may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the 9N Thermal Oxidizer and Inert Oven systems. The periodic monitoring requirements, maintenance procedures, recordkeeping and quality assurance/quality control measures listed below only apply for those times when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in an applicable Iowa DNR Construction Permit.

Monitoring Guidelines

The O&M Plan will set forth indicator ranges for the combustion temperatures of the thermal oxidizer and inert oven. The facility will continuously monitor the combustion temperatures while the thermal oxidizer and inert oven are operating. Corrective action will be initiated within 8 hours, if there is an excursion of the combustion temperature from the ranges specified in the O&M plan. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not indicate a violation of an applicable requirement. If the corrective action measures indicate that there is a failure on the thermal oxidizer, and such failure has the effect of increasing emissions from the associated emission point, the facility will **take action with** response steps. **This will occur** within 8 hours of discovery of any failure of the thermal oxidizer, and these steps shall include a timetable for completion. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits, then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

9N Thermal Oxidizer Agency Operation and Maintenance Plan

Monitoring

- Continuous monitoring of combustion temperature
- Corrective action will be taken immediately if the combustion temperature deviates from the manufacturer's specifications. (1450° F – 2100° F)

Record Keeping

- Time of operation of control equipment
- Down time of control equipment during periods of solvent coating on the connected process equipment
- Repair and preventative maintenance performed on the thermal oxidizer
- Monthly mass balances information for VOCs and criteria pollutants (this requirement is being met at the time of permit issuance through the computer “Emissions” program, which tracks the quantity of solvent associated with coating materials input to the coater, products, the quantity of solvent associated with products, the quantities of solvent recovered and lost in the system).
- Record temperature once per minute during operation.

Inspections: Bi-Monthly

- Perform preventative maintenance procedures on the pneumatic air dryer according to the criteria stated in MA-0138.

Inspections: Semi-Annually

- Perform preventative maintenance procedures on the barometric damper operation according to the criteria stated in MA-0138.

Inspections: Annual

- The mechanical and other systems of the thermal oxidizer shall be inspected annually according to the criteria stated in MA-0138.

Preventative Maintenance

- The plant shall continue to operate its formal program of preventative maintenance as needed to ensure proper operation of the thermal oxidizer.
- Relevant preventative maintenance activities are listed in MA-0138.
- Individual procedures may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the thermal oxidizer.

Quality Assurance/Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications or 3M defined specifications in accordance with good air pollution control practices.

9N Inert Oven Agency Operation and Maintenance Plan**Monitoring**

- Monitoring of cumulative amounts of recovered solvent

Record Keeping

- Time of operation of control equipment
- Down time of control equipment during periods of solvent coating on the connected process equipment
- 9N process variables
- Repair and preventative maintenance performed on the inert oven
- Monthly mass balances information for VOCs and criteria pollutants (this requirement is being met at the time of permit issuance through the computer “Emissions” program, which tracks the quantity of solvent associated with coating materials input to the coater, products, the quantity of solvent associated with products, the quantities of solvent recovered and lost in the system).

Inspections: Weekly

- Perform preventative maintenance procedures on the 9N Oven Oxygen Analyzer according to the criteria stated in MA-0137.

Inspections: Monthly

- Perform preventative maintenance procedures on the 9N Oven Bladder according to the criteria stated in MA-0137.

Inspections: Quarterly

- Perform preventative maintenance procedures on the 9N Oven Seal according to the criteria stated in MA-0137.

Inspections: 16 Weeks

- Perform preventative maintenance procedures on the Condenser, Ductwork and Main Oven Body according to the criteria stated in MA-0137.

Inspections: Semi-Annually

- Perform preventative maintenance procedures on the Modicon backup for Compounding, 9N Inert Oven Oxygen Analyzer, Nitrogen Supply Pressure Switch, and Nitrogen Flow Control Valve according to the criteria stated in MA-0137.

Inspections: Annual

- The mechanical and other systems of the inert oven shall be inspected annually according to the criteria stated in MA-0137.

Preventative Maintenance

- The plant shall continue to operate its formal program of preventative maintenance as needed to ensure proper operation of the inert oven.
- Relevant preventative maintenance activities are listed in MA-0137.
- Individual procedures may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the inert oven.

Quality Assurance/Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications or 3M defined specifications in accordance with good air pollution control practices.

Emission Point ID Number: 003-097**Associated Equipment**

Associated Emission Unit ID Numbers : Compounding Blow Down Tank, which includes the following units (see table):

B1, B2, VP-Silo, BX, BH, BI, FX, FH, FI, FIOA, FAA, BM, M1, M2, M3, S1, S2, S3, S4, S5, S6, S7, 8NC R1, 8NC R2, SURGE 1, SURGE 2, SURGE 3, SURGE 4, SURGE 5, SURGE 6, FLUSH 1, FLUSH 2, SURGE 6

Emissions Control Equipment ID Number: CF1

Emissions Control Equipment Description: Cartridge Filters

Applicable Requirements

The following emission units vent through this emission point:

Emission Unit #/Description		Rated Capacity
EU B1	Blend Tank	400 gal./hr. of adhesive
EU B2	Blend Tank	400 gal./hr. of adhesive
VP-GLASS SILO	Vacuum Pump-Glass Silo	114 lb./hr. of inorganic material
EU BX	Premix Tank	50 gallons of adhesive
EU BH	Premix Tank	50 gallons of adhesive
EU BI	Premix Tank	50 gallons of adhesive
EU FX	Feed Tank	50 gallons of adhesive
EU FH	Feed Tank	50 gallons of adhesive
EU FI	Feed Tank	50 gallons of adhesive
EU FIOA	Isopropyl Alcohol Tank	200 gallons of isopropyl alcohol
EU FAA	Acrylic Acid Tank	50 gallons of acrylic acid
EU BM	Storage Tank	10 gallons of adhesive
EU M1	Mixer	916 gallons of adhesive
EU M2	Mixer	916 gallons of adhesive
EU M3	Mixer	916 gallons of adhesive
EU S1	Batch Storage Mix Tank	2878 gallons of adhesive
EU S2	Batch Storage Mix Tank	3886 gallons of adhesive
EU S3	Batch Storage Mix Tank	3886 gallons of adhesive
EU S4	Batch Storage Mix Tank	3886 gallons of adhesive
EU S5	Batch Storage Mix Tank	2878 gallons of adhesive
EU S6	Batch Storage Mix Tank	2878 gallons of adhesive
EU S7	Batch Storage Mix Tank	2878 gallons of adhesive
EU 8NC R1	Coating Tank	25 gallons of coating
EU 8NC R2	Coating Tank	30 gallons of coating
EU SURGE 1	Adhesive Mix Tank	137 gallons of adhesive
EU SURGE 2	Adhesive Mix Tank	137 gallons of adhesive
EU SURGE 3	Adhesive Mix Tank	137 gallons of adhesive

EU SURGE 4	Adhesive Mix Tank	100 gallons of adhesive
EU SURGE 5	Adhesive Mix Tank	100 gallons of adhesive
EU FLUSH1	Adhesive and IOA Flush Tank	100 gallons of adhesive and IOA
EU FLUSH2	Adhesive and IOA Flush Tank	100 gallons of adhesive and IOA
SURGE 6	Adhesive Mix Tank	100 gallons of adhesive

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 92-A-655-S3
567 IAC 23.3(2)"d"

⁽¹⁾If an opacity measurement exceeds the indicator opacity (25%) this facility should promptly investigate this source and make corrections. However, if after corrections are made the opacity continues to exceed the indicator opacity the Department may require a demonstration of compliance with mass emission limits, i.e. stack tests.

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 92-A-655-S3
567 IAC 23.3(2)"a"

Pollutant: VOC

Emission Limit(s): 0.9 lb./hr⁽²⁾, 3.9 TPY⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 92-A-655-S3

⁽²⁾ Emission rate used in original permit to make the original project (Project Number 92-253)
a "synthetic minor" for the purposes of PSD.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

No operating limits are required for these emission units at this time

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 40.1

Stack Diameter (inches): 9

Stack Exhaust Flow Rate (scfm): Natural draft

Stack Temperature (°F): 72

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 92-A-655-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

No opacity monitoring required at this time.

No stack testing required at this time.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 003-108**Associated Equipment**

Associated Emission Unit ID Numbers : 9NS1 Fugitive Emissions

Applicable Requirements

Emission Unit vented through this Emission Point: 9NS1 Fugitive Emissions

Emission Unit Description: Coating Line Area Ventilation

Raw Material/Fuel: Coating

Rated Capacity: 58.5 lb solids/minute and 23.3 lb VOC/min

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOCs

Emission Limit(s): 139.8 lb./hr., 612 TPY

The emission standards are variable. These limits represent the maximum possible allowable emissions based on NSPS Subpart RR and the equipment capacity for the entire 9N line.

Authority for Requirement: Iowa DNR Construction Permit 98-A-626

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard, which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

The following conditions are for the entire 9N coating line, permits 93-A-139-S4 through 93-A-143-S4 and 98-A-626.

- A. The maximum application rate for the 9N coating line 58.5 lb solids/minute and 23.3 lb VOC/min.
- B. The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:
 - a) The owner or operator must comply with at least one of the following standards:
 - 1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
 - 2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.
 - 3. The standard specified in 40 CFR 60.443(b), calculated over one calendar month, and the construction permit emission limits must not be exceeded.
 - b) A temperature measuring device must be properly installed, calibrated and maintained according to specifications, which will measure the thermal oxidizer combustion temperature and the temperature of the exhaust gases before they reach the stack. The combustion temperature of the thermal oxidizer, with the exception of process start-ups and shutdowns, must be maintained at a minimum of 1400 degrees Fahrenheit during operation. This permit condition, B(b), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.
 - c) For the solvent recovery system connected to the oven, the owner or operator must properly install, calibrate and maintain a monitoring device for indicating the cumulative amounts of solvents recovered by the device over a calendar month period.

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits for the entire 9N line.

- A. The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B. The owner or operator must calculate the overall monthly VOC reduction and compare it to the VOC reduction obtained in the initial performance test. This must be done by calculating the monthly average of the quantity of VOCs used vs. VOCs emitted, as required in 40 CFR 60.443 and 60.444.

- C. The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
- a) Quantity of each solvent (VOC) and solid used in this coating line.
 - b) All calculations performed.
 - c) Combustion temperature of the thermal oxidizer and the temperature of the exhaust gas prior to entering the stack. This permit condition, C(c), only applies when the thermal oxidizer is being used to demonstrate compliance with conditions of NSPS Subpart RR or if specified in any applicable Iowa DNR Construction Permits.

Authority for Requirement: Iowa DNR Construction Permit 98-A-626

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 44

Stack Diameter (inches): 22

Stack Exhaust Flow Rate (scfm): 10,000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 98-A-626

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Refer to Emission Point 007-001 for the Thermal Oxidizer Operation and Maintenance Plan.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-005 (1N Bypass Stack)

Associated Equipment

Associated Emission Unit ID Numbers : 1NO and 1ND2

Applicable Requirements

Emission Unit vented through this Emission Point: 1NO

Emission Unit Description: Drying/Coating

Raw Material/Fuel: Coating

Rated Capacity: 2,283 lb./hr.

Emission Unit vented through this Emission Point: 1ND2

Emission Unit Description: Drying/Coating

Raw Material/Fuel: Coating

Rated Capacity: 360 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): Total VOC emissions from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004 shall not exceed 2000 tons per rolling twelve month period.

Authority for Requirement: Iowa DNR Construction Permits 90-A-152S, 90-A-153S, 90-A-154S, and 567 IAC 22.108(3)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters: A thermal oxidizer shall be used to control VOC emissions from Emission Unit 1ND2 and a solvent recovery unit shall be used to control VOC emissions from Emission Unit 1NO. In the event of an emergency this bypass stack may be used. During bypass, emissions are not controlled. Emissions from the bypass shall be calculated and included in the total permitted allowable of 2000 tons per rolling twelve month period. Any exceedance of the allowable emission rate shall be reported to the Department within 8 hours or at the start of the first working day following the onset of an incident.

Authority for Requirement: 567 IAC 22.108(3)

Record keeping:

- Record all bypass periods including the date, time, and duration of the bypass.
- Records shall be kept on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall contain data sufficient to demonstrate compliance with the VOC emission limit of 2000 tons per rolling twelve month period from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004.

Authority for Requirement: 567 IAC 22.108(3)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

*Refer to Emission Point 007-001 for the Thermal Oxidizer Operation and Maintenance Plan.
Refer to Emission Points 024-003 and 024-004 for the Solvent Recovery Unit Operation and Maintenance Plan.*

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-006 (2N Bypass Stack)

Associated Equipment

Associated Emission Unit ID Numbers : 2NAD1, 2NAD2, 2NBO, and 2NBD

Applicable Requirements

Emission Unit vented through this Emission Point: 2NAD1

Emission Unit Description: Dryer

Raw Material/Fuel: Coating

Rated Capacity: 282 KCF/hr

Emission Unit vented through this Emission Point: 2NAD2

Emission Unit Description: Dryer

Raw Material/Fuel: Coating

Rated Capacity: 240 KCF/hr

Emission Unit vented through this Emission Point: 2NBO

Emission Unit Description: Dryer

Raw Material/Fuel: Coating

Rated Capacity: 2280 KCF/hr

Emission Unit vented through this Emission Point: 2NBD

Emission Unit Description: Dryer

Raw Material/Fuel: Coating

Rated Capacity: 520 KCF/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): Total VOC emissions from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004 shall not exceed 2000 tons per rolling twelve month period.

Authority for Requirement: Iowa DNR Construction Permits 90-A-152S, 90-A-153S, 90-A-154S, and 567 IAC 22.108(3)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters: A thermal oxidizer shall be used to control VOC emissions from Emission Units 2NAD1 and 2NAD2, and a fume incinerator shall be used to control VOC emissions from Emission Units 2NBO and 2NBD. In the event of an emergency this bypass stack may be used. During bypass, emissions are not controlled. Emissions from the bypass shall be calculated and included in the total permitted allowable of 2000 tons per rolling twelve month period. Any exceedance of the allowable emission rate shall be reported to the Department within 8 hours or at the start of the first working day following the onset of an incident.

Authority for Requirement: 567 IAC 22.108(3)

Reporting & Record keeping:

- Record all bypass periods including the date, time, and duration of the bypass.
- Records shall be kept on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall contain data sufficient to demonstrate compliance with the VOC emission limit of 2000 tons per rolling twelve month period from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004.

Authority for Requirement: 567 IAC 22.108(3)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Refer to Emission Point 007-001 for the Thermal Oxidizer Operation and Maintenance Plan.

Refer to Emission Point 007-004 for the Fume Incinerator Operation and Maintenance Plan.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-009

Associated Equipment

Associated Emission Unit ID Numbers : Tank3

Applicable Requirements

Emission Unit vented through this Emission Point: Tank3

Emission Unit Description: Storage Tank

Raw Material/Fuel: Adhesive

Rated Capacity: 240 gal./hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput: The twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-662 shall not exceed 2,100,000 gallons.

Reporting & Recordkeeping:

- The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-662. Records shall be maintained for five years and available for inspection upon request by representatives of the Department.
- The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 98-A-662. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 98-A-662 and 40 CFR 60 Subpart Kb

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 37

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (acfm): vent to atmosphere

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-662

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-010

Associated Equipment

Associated Emission Unit ID Numbers : Tank4

Applicable Requirements

Emission Unit vented through this Emission Point: Tank4

Emission Unit Description: Storage Tank

Raw Material/Fuel: Adhesive

Rated Capacity: 240 gal/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput: The twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-663 shall not exceed 2,100,000 gallons.

Reporting & Recordkeeping:

- The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-663. Records shall be maintained for five years and available for inspection upon request by representatives of the Department.
- The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 98-A-663. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 98-A-663 and 40 CFR 60 Subpart Kb

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 37

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (acfm): vent to atmosphere

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-663

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-011**Associated Equipment**

Associated Emission Unit ID Numbers : Tank5

Applicable Requirements

Emission Unit vented through this Emission Point: Tank5

Emission Unit Description: Storage Tank

Raw Material/Fuel: Adhesive

Rated Capacity: 240 gal./hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput: The twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-664 shall not exceed 2,100,000 gallons.

Reporting &Recordkeeping:

- The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-664. Records shall be maintained for five years and available for inspection upon request by representatives of the Department.
- The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 98-A-664. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 98-A-664 and 40 CFR 60 Subpart Kb

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 37

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (acfm): vent to atmosphere

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-664

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-012 (5N and 6N Bypass Stack)

Associated Equipment

Associated Emission Unit ID Numbers: 5NO1, 5NO2, and 6ND

Applicable Requirements

Emission Unit vented through this Emission Point: 5NO1

Emission Unit Description: Drying

Raw Material/Fuel: Coating

Rated Capacity: 720 KCF/hr

Emission Unit vented through this Emission Point: 5NO2

Emission Unit Description: Drying

Raw Material/Fuel: Coating

Rated Capacity: 720 KCF/hr

Emission Unit vented through this Emission Point: 6ND

Emission Unit Description: Coating

Raw Material/Fuel: Coating

Rated Capacity: 1855 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): Total VOC emissions from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004 shall not exceed 2000 tons per rolling twelve month period.

Authority for Requirement: Iowa DNR Construction Permits 90-A-152S, 90-A-153S, 90-A-154S, and 567 IAC 22.108(3)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters: A fume incinerator shall be used to control VOC emissions from Emission Units 5NO1 and 5NO2. In the event of an emergency this bypass stack may be used. During bypass, emissions are not controlled. Emissions from the bypass shall be calculated and included in the total permitted allowable of 2000 tons per rolling twelve month period. Any exceedance of the allowable emission rate shall be reported to the Department within 8 hours or at the start of the first working day following the onset of an incident.

Authority for Requirement: 567 IAC 22.108(3)

Reporting & Record keeping:

- Record all bypass periods including the date, time, and duration of the bypass.
- Records shall be kept on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall contain data sufficient to demonstrate compliance with the VOC emission limit of 2000 tons per rolling twelve month period from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004.

Authority for Requirement: 567 IAC 22.108(3)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Refer to Emission Point 007-004 for the Fume Incinerator Operation and Maintenance Plan.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-042**Associated Equipment**

Associated Emission Unit ID Numbers : 9NRC

Applicable Requirements

Emission Unit vented through this Emission Point: 9NRC

Emission Unit Description: Spray Coating Booth

Raw Material/Fuel: Coating

Rated Capacity: 1 gal/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: 567 IAC 23.3(14)

Iowa DNR Construction Permit 93-A-145

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of operation: Operating hours shall not exceed 200 hours per 12 month rolling total.
Operating hours shall not exceed 1 hour per 24 hour rolling period.

Process throughput: Application rate shall not exceed 1 gallon per hour.

Reporting & Record keeping: Records of spray gun operating time and material consumption
shall be kept for a period of five years.

Authority for Requirement: Iowa DNR Construction Permit 93-A-145

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-055**Associated Equipment**

Associated Emission Unit ID Numbers : TANK 1

Applicable Requirements

Emission Unit vented through this Emission Point: TANK 1

Emission Unit Description: Storage Tank

Raw Material/Fuel: Adhesive

Rated Capacity: 240 gal./hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput: The twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-660 shall not exceed 2,100,000 gallons.

Reporting & Recordkeeping:

- The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-660. Records shall be maintained for five years and available for inspection upon request by representatives of the Department.
- The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 98-A-660. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 98-A-660 and 40 CFR 60 Subpart Kb

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 37

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (acfm): vent to atmosphere

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-660

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-056

Associated Equipment

Associated Emission Unit ID Numbers : TANK 2

Applicable Requirements

Emission Unit vented through this Emission Point: TANK 2

Emission Unit Description: Storage Tank

Raw Material/Fuel: Adhesive

Rated Capacity: 240 gal./hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput: The twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-661 shall not exceed 2,100,000 gallons.

Reporting & Recordkeeping:

- The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-661. Records shall be maintained for five years and available for inspection upon request by representatives of the Department.
- The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 98-A-661. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 98-A-661 and 40 CFR 60 Subpart Kb

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 37

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (acfm): vent to atmosphere

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-661

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-057

Associated Equipment

Associated Emission Unit ID Numbers : TANK 6

Applicable Requirements

Emission Unit vented through this Emission Point: TANK 6

Emission Unit Description: Storage Tank

Raw Material/Fuel: Adhesive

Rated Capacity: 180 gal./hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput: The twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-665 shall not exceed 1,580,000 gallons.

Reporting & Recordkeeping:

- The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-665. Records shall be maintained for five years and available for inspection upon request by representatives of the Department.
- The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 98-A-665. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 98-A-665 and 40 CFR 60 Subpart Kb

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 37

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (acfm): vent to atmosphere

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-665

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-060**Associated Equipment**

Associated Emission Unit ID Numbers : TANK 8

Applicable Requirements

Emission Unit vented through this Emission Point: TANK 8

Emission Unit Description: Storage Tank

Raw Material/Fuel: Adhesive

Rated Capacity: 180 gal./hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput: The twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-667 shall not exceed 1,580,000 gallons.

Reporting & Recordkeeping:

- The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-667. Records shall be maintained for five years and available for inspection upon request by representatives of the Department.
- The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 98-A-667. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 98-A-667 and 40 CFR 60 Subpart Kb

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 37

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (acfm): vent to atmosphere

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-667

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-061

Associated Equipment

Associated Emission Unit ID Numbers : TANK 7

Applicable Requirements

Emission Unit vented through this Emission Point: TANK 7

Emission Unit Description: Storage Tank

Raw Material/Fuel: Adhesive

Rated Capacity: 180 gal./hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput: The twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-666 shall not exceed 1,580,000 gallons.

Reporting & Recordkeeping:

- The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, amount of material stored in the storage vessel administered under DNR permit 98-A-666. Records shall be maintained for five years and available for inspection upon request by representatives of the Department.
- The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 98-A-666. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 98-A-666 and 40 CFR 60 Subpart Kb

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 37

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (acfm): vent to atmosphere

Stack Temperature (°F): ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-666

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-064**Associated Equipment**

Associated Emission Unit ID Numbers : 8N

Emissions Control Equipment ID Number: 8N TO (optional)

Emissions Control Equipment Description: Thermal Oxidizer

Applicable Requirements

Emission Unit vented through this Emission Point: 8N

Emission Unit Description: Cure Chamber

Raw Material/Fuel: Adhesive

Rated Capacity: 170 lb./minute

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 30 TPY⁽¹⁾, 0.2 lb./lb. of solids applied

Authority for Requirement: Iowa DNR Construction Permit 92-A-653-S4

567 IAC 23.1(2)"qq"

NSPS Subpart RR (40 CFR §60.440 – 40 CFR §60.447)

⁽¹⁾ Emission rate used in original permit to make the original project (Project Number 92-253) a “synthetic minor” for the purposes of PSD. This is the total for emission units permitted under permit numbers 92-A-653-S4, 92-A-652-S3, 95-A-290-S1, 01-A-839, 01-A-840, 01-A-841, and 01-A-869.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The entire 8N line is subject to the NSPS subpart RR because all of the processes (8N-1 through 8N-6) are located between the wind and rewind reels. NSPS subpart RR applies for all stacks within 8N line.

The permittee is responsible for ensuring that this entire coating operation follow all of the regulations specified in 40 CFR 60 subpart RR. See conditions listed under:

"NSPS Requirements" beginning on page 10 of this permit

All records and calculations must be satisfactory for demonstrating compliance with permit conditions and all conditions of 40 CFR 60 subpart RR.

Authority for Requirement: Iowa DNR Construction Permit 92-A-653-S4 and 40 CFR 60 subpart RR

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 62

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 4000

Stack Temperature (°F): 80

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 92-A-653-S4

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Refer to Emission Point 004-082 for the 8N Thermal Oxidizer Operation and Maintenance Plan.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-065

Associated Equipment

Associated Emission Unit ID Numbers: 8NCT

Applicable Requirements

Emission Unit vented through this Emission Point: 8NCT

Emission Unit Description: Corona Treater

Raw Material/Fuel: Electrical energy applied to the film

Rated Capacity: 7.56 KW

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Ozone

Emission Limit(s): 0.73 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 94-A-545-S2

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 64.9

Stack Diameter (inches): 30.5 x 16.25

Stack Exhaust Flow Rate (scfm): 5,300

Stack Temperature (°F): 72

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 94-A-545-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-067

Associated Equipment

Associated Emission Unit ID Numbers : 6NS1

Applicable Requirements

Emission Unit vented through this Emission Point: 6NS1

Emission Unit Description: Coating Chamber

Raw Material/Fuel: Adhesive

Rated Capacity: 113 lb/min

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 43 TPY

Authority for Requirement: Iowa DNR Construction Permit 95-A-290-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

- 1) This source must be hooked up to the thermal oxidizer along with the 8N. The thermal oxidizer may be bypassed as long as the permittee stays in compliance with all permit conditions.
- 2) No particulate emissions of any kind may exit this stack.
- 3) The thermal oxidizer must be used as often as is necessary to comply with emission limits. The controlled and uncontrolled emission rates will be used to determine the required operating hours for the thermal oxidizer.
- 4) Monthly records must be kept which show the operating hours for the thermal oxidizer, when controlling emissions from the 6N. Records must also show the operating hours for the 6N coater.
- 5) Using the operating hours and the emission rates from the stack tests, the 12 month emission rate must be calculated based on a twelve month rolling period.
- 6) The Department must be notified if this source is operated outside of these limits no later than seven days after such operation.

Authority for Requirement: Iowa DNR Construction Permit 95-A-290-S1

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 62

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (scfm): 12,000

Stack Temperature (°F): 85

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 95-A-290-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Refer to Emission Point 004-082 for the 8N Thermal Oxidizer Operation and Maintenance Plan.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-069

Associated Equipment

Associated Emission Unit ID Numbers : 8NS1

Applicable Requirements

Emission Unit vented through this Emission Point: 8NS1

Emission Unit Description: Coater

Raw Material/Fuel: Adhesive

Rated Capacity: 170 lb./minute

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 30 TPY⁽¹⁾, 0.2 lb./lb. of solids applied

Authority for Requirement: Iowa DNR Construction Permit 92-A-652-S4

567 IAC 23.1(2)"qq"

NSPS Subpart RR (40 CFR §60.440 – 40 CFR §60.447)

⁽¹⁾ Emission rate used in original permit to make the original project (Project Number 92-253) a “synthetic minor” for the purposes of PSD. This is the total for emission units permitted under permit numbers 92-A-653-S4, 92-A-652-S3, 95-A-290-S1, 01-A-839, 01-A-840, 01-A-841, and 01-A-869.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The entire 8N line is subject to the NSPS subpart RR because all of the processes (8N-1 through 8N-6) are located between the wind and rewind reels. NSPS subpart RR applies for all stacks within 8N line.

The permittee is responsible for ensuring that this entire coating operation follow all of the regulations specified in 40 CFR 60 subpart RR. See conditions listed under:

"NSPS Requirements" beginning on page 10 of this permit

All records and calculations must be satisfactory for demonstrating compliance with permit conditions and all conditions of 40 CFR 60 subpart RR.

Authority for Requirement: Iowa DNR Construction Permit 92-A-652-S4 and 40 CFR 60 subpart RR

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 64

Stack Diameter (inches): 26.1

Stack Exhaust Flow Rate (scfm): 8,300

Stack Temperature (°F): 80

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 92-A-652-S4

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Refer to Emission Point 004-082 for the 8N Thermal Oxidizer Operation and Maintenance Plan.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-071 (Dual Stack with 004-072)

Associated Equipment

Associated Emission Unit ID Numbers : 8NC

Applicable Requirements

Emission Unit vented through this Emission Point: 8NC

Emission Unit Description: Coater

Raw Material/Fuel: Adhesive

Rated Capacity: 170 lb./minute

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 30 TPY⁽¹⁾, 0.2 lb./lb. of solids applied

Authority for Requirement: Iowa DNR Construction Permit 01-A-839

567 IAC 23.1(2)"qq"

NSPS Subpart RR (40 CFR §60.440 – 40 CFR §60.447).

⁽¹⁾ Emission rate used in original permit to make the original project (Project Number 92-253) a "synthetic minor" for the purposes of PSD. This is the total for emission units permitted under permit numbers 92-A-653-S4, 92-A-652-S4, 95-A-290-S1, 01-A-839, 01-A-840, 01-A-841, and 01-A-869.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The entire 8N line is subject to the NSPS subpart RR because all of the processes (8N-1 through 8N-6) are located between the wind and rewind reels. NSPS subpart RR applies for all stacks within 8N line.

The permittee is responsible for ensuring that this entire coating operation follow all of the regulations specified in 40 CFR 60 subpart RR. See conditions listed under:

"NSPS Requirements" beginning on page 10 of this permit

All records and calculations must be satisfactory for demonstrating compliance with permit conditions and all conditions of 40 CFR 60 subpart RR.

Authority for Requirement: Iowa DNR Construction Permit 01-A-839 and 40 CFR 60 subpart RR

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 60.5

Stack Diameter (inches): 6.7

Stack Exhaust Flow Rate (scfm): 800

Stack Temperature (°F): 72

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 01-A-839

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-072 (Dual Stack with 004-071)

Associated Equipment

Associated Emission Unit ID Numbers : 8NC

Applicable Requirements

Emission Unit vented through this Emission Point: 8NC

Emission Unit Description: Coater

Raw Material/Fuel: Adhesive

Rated Capacity: 170 lb./minute

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 30 TPY⁽¹⁾, 0.2 lb./lb. of solids applied

Authority for Requirement: 567 IAC 23.1(2)"qq"

NSPS Subpart RR (40 CFR §60.440 – 40 CFR §60.447

⁽¹⁾ Emission rate used in original permit to make the original project (Project Number 92-253) a “synthetic minor” for the purposes of PSD. This is the total for emission units permitted under permit numbers 92-A-653-S4, 92-A-652-S3, 95-A-290-S1, 01-A-839, 01-A-840, 01-A-841, and 01-A-869. All emissions are assigned to 004-071

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The entire 8N line is subject to the NSPS subpart RR because all of the processes (8N-1 through 8N-6) are located between the wind and rewind reels. NSPS subpart RR applies for all stacks within 8N line.

The permittee is responsible for ensuring that this entire coating operation follow all of the regulations specified in 40 CFR 60 subpart RR. See conditions listed under:

"NSPS Requirements" beginning on page of this permit

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Authority for Requirement: 40 CFR 60 subpart RR

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-076

Associated Equipment

Associated Emission Unit ID Numbers : 8NC R1 and 8NC R2

Applicable Requirements

Emission Unit vented through this Emission Point: 8NC R1

Emission Unit Description: Coating Tank

Raw Material/Fuel: coating

Rated Capacity: 25 gallons

Emission Unit vented through this Emission Point: 8NC R2

Emission Unit Description: Storage Tank

Raw Material/Fuel: coating

Rated Capacity: 30 gallons

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 0.96lb./hr., 4.2 TPY

Authority for Requirement: Iowa DNR Construction Permit 92-A-654-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

No operating limits are required for these emission units at this time.

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 43.5

Stack Diameter (inches): 5 X 10

Stack Exhaust Flow Rate (scfm): 500

Stack Temperature (°F): 72

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 92-A-654-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics

are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-077

Associated Equipment

Associated Emission Unit ID Numbers : Tank 10

Applicable Requirements

Emission Unit vented through this Emission Point: Tank 10

Emission Unit Description: Storage tank

Raw Material/Fuel: Coating

Rated Capacity: 10,600gallons

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Recordkeeping:

The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 93-A-152. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 93-A-152 and 40 CFR 60 Subpart Kb

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-078

Associated Equipment

Associated Emission Unit ID Numbers : Tank 9

Applicable Requirements

Emission Unit vented through this Emission Point: Tank 9

Emission Unit Description: Storage tank

Raw Material/Fuel: Coating

Rated Capacity: 10,600 gallons

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No emission limits are applicable at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Recordkeeping:

The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 93-A-151. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 93-A-151 and 40 CFR 60 Subpart Kb

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-079

Associated Equipment

Associated Emission Unit ID Numbers : 6N Enclosure

Applicable Requirements

Emission Unit vented through this Emission Point: 6N Enclosure

Emission Unit Description: Coating

Raw Material/Fuel: Adhesive

Rated Capacity: 113 lb/min

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No applicable requirements per Iowa DNR Construction Permit 93-A-341.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-080

Associated Equipment

Associated Emission Unit ID Numbers: 8NC

Applicable Requirements

Emission Unit vented through this Emission Point: 8NC

Emission Unit Description: Coater

Raw Material/Fuel: Adhesive

Rated Capacity: 170 lb./minute

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 30 TPY⁽¹⁾, 0.2 lb./lb. of solids applied

Authority for Requirement: Iowa DNR Construction Permit 01-A-840

567 IAC 23.1(2)"qq"

NSPS Subpart RR (40 CFR §60.440 – 40 CFR §60.447

⁽¹⁾ Emission rate used in original permit to make the original project (Project Number 92-253) a “synthetic minor” for the purposes of PSD. This is the total for emission units permitted under permit numbers 92-A-653-S4, 92-A-652-S3, 95-A-290-S1, 01-A-839, 01-A-840, 01-A-841, and 01-A-869.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Authority for Requirement: Iowa DNR Construction Permit 01-A-840 and 40 CFR 60 subpart RR

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 60.5

Stack Diameter (inches): 6.7

Stack Exhaust Flow Rate (scfm): 25

Stack Temperature (°F): 80

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 01-A-840

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-081 (Dual stack with 004-088)

Associated Equipment

Associated Emission Unit ID Numbers : 8N Enclose

Applicable Requirements

Emission Unit vented through this Emission Point: 8N Enclose

Emission Unit Description: Coating

Raw Material/Fuel: Adhesive

Rated Capacity: 170 lb./minute

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 30 TPY^(1, 2), 0.2 lb./lb. solids applied^(2, 3)

Authority for Requirement: Iowa DNR Construction Permit 01-A-841

⁽¹⁾ Emission rate used in original permit to make the original project (Project Number 92-253) a “synthetic minor” for the purposes of PSD. This is the total for emission units permitted under permit numbers 92-A-653-S4, 92-A-652-S4, 95-A-290-S1, 01-A-839, 01-A-840, 01-A-841, and 01-A-869. This limit also includes emissions from EP 004-088.

⁽²⁾ EP 004-081, covered under IDNR Construction Permit # 01-A-841, was supplemented with stack, 004-088. The original stack and then the installation of 004-088 were completed under a construction permit exemption letter from Clark Ott, March 12, 1996. Roughly 95% of the emissions exhaust through 004-088 and 5% through 004-081.

⁽³⁾ See also NSPS 40 CFR 60 subpart RR, 40 CFR §60.442(a)(1).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The entire 8N line is subject to the NSPS subpart RR because all of the processes (8N-1 through 8N-6) are located between the wind and rewind reels. NSPS subpart RR applies for all stacks within 8N line.

The permittee is responsible for ensuring that this entire coating operation follow all of the regulations specified in 40 CFR 60 subpart RR. See conditions listed under:

"NSPS Requirements" beginning on page 10 of this permit

All records and calculations must be satisfactory for demonstrating compliance with permit conditions and all conditions of 40 CFR 60 subpart RR.

Authority for Requirement: Iowa DNR Construction Permit 01-A-841 and 40 CFR 60 subpart RR

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 65.3

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 3000

Stack Temperature (°F): 72

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 01-A-841

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Refer to Emission Point 004-082 for 8N Thermal Oxidizer Operation and Maintenance Plan.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-082**Associated Equipment**

Associated Emission Unit ID Numbers: B1, B2, VP-GLASS SILO, BX, BH, BI, FX, FH, FI, FIOA, FAA, BM, M1, M2, M3, S1, S2, S3, S4, S5, S6, S7, 8NC R1, 8NC R2, SURGE 1, SURGE 2, SURGE 3, SURGE 4, SURGE 5, FLUSH1, FLUSH2, SURGE 6, 8NC, 8NS1, 8NC, 8NENCLOSE, 8NCR1, and 8NCR2

Emissions Control Equipment ID Number: 8N TO

Emissions Control Equipment Description: Thermal Oxidizer

Applicable Requirements

The following emission units vent through this emission point:

Emission Unit #/Description		Rated Capacity
EU B1	Blend Tank	400 gal./hr. of adhesive
EU B2	Blend Tank	400 gal./hr. of adhesive
EU VP-GLASS SILO	Vacuum Pump-Glass Silo	114 lb./hr. of inorganic material
EU BX	Premix Tank	50 gallons of adhesive
EU BH	Premix Tank	50 gallons of adhesive
EU BI	Premix Tank	50 gallons of adhesive
EU FX	Feed Tank	50 gallons of adhesive
EU FH	Feed Tank	50 gallons of adhesive
EU FI	Feed Tank	50 gallons of adhesive
EU FIOA	Isopropyl Alcohol Tank	200 gallons of isopropyl alcohol
EU FAA	Acrylic Acid Tank	50 gallons of acrylic acid
EU BM	Storage Tank	10 gallons of adhesive
EU M1	Mixer	916 gallons of adhesive
EU M2	Mixer	916 gallons of adhesive
EU M3	Mixer	916 gallons of adhesive
EU S1	Batch Storage Mix Tank	2878 gallons of adhesive
EU S2	Batch Storage Mix Tank	3886 gallons of adhesive
EU S3	Batch Storage Mix Tank	3886 gallons of adhesive
EU S4	Batch Storage Mix Tank	3886 gallons of adhesive
EU S5	Batch Storage Mix Tank	2878 gallons of adhesive
EU S6	Batch Storage Mix Tank	2878 gallons of adhesive
EU S7	Batch Storage Mix Tank	2878 gallons of adhesive
EU 8NC R1	Coating Tank	25 gallons of coating
EU 8NC R2	Coating Tank	30 gallons of coating
EU SURGE 1	Adhesive Mix Tank	137 gallons of adhesive
EU SURGE 2	Adhesive Mix Tank	137 gallons of adhesive
EU SURGE 3	Adhesive Mix Tank	137 gallons of adhesive

EU SURGE 4	Adhesive Mix Tank	100 gallons of adhesive
EU SURGE 5	Adhesive Mix Tank	100 gallons of adhesive
EU FLUSH1	Adhesive and IOA Flush Tank	100 gallons of adhesive and IOA
EU FLUSH2	Adhesive and IOA Flush Tank	100 gallons of adhesive and IOA
EU SURGE 6	Adhesive Mix Tank	100 gallons of adhesive
EU 8NC	Cure Chamber	170 lb./min. of adhesive
EU 8NS1	Coating Dhamber	170 lb./min. of adhesive
EU 8NC	Coating – vacuum plate exhaust	170 lb./min. of adhesive
EU 8ENCLOSE	Web Enclosure – coating/delam	170 lb./min. of adhesive

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-869
567 IAC 23.3(2)"d"

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 01-A-869
567 IAC 23.3(2)"a"

Pollutant: Sulfur Oxides (SO_x)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 01-A-869
567 IAC 23.3(3)"e"

Pollutant: VOC

Emission Limit(s): 30 TPY⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-869
567 IAC 23.1(2)"qq"³
NSPS Subpart RR (40 CFR §60.440 – 40 CFR §60.447).

⁽²⁾ Emission rate used in original permit to make the original project (Project Number 92-253) a "synthetic minor" for the purposes of PSD. This is the total for emission units permitted under permit numbers 92-A-653-S4, 92-A-652-S4, 95-A-290-S1, 01-A-839, 01-A-840, 01-A-841, and 01-A-869.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The entire 8N line is subject to the NSPS subpart RR because all of the processes (8N-1 through 8N-6) are located between the wind and rewind reels. NSPS subpart RR applies for all stacks within 8N line.

The permittee is responsible for ensuring that this entire coating operation follow all of the regulations specified in 40 CFR 60 subpart RR. See conditions listed under:

"NSPS Requirements" beginning on page 10 of this permit

All records and calculations must be satisfactory for demonstrating compliance with permit conditions and all conditions of 40 CFR 60 subpart RR.

Authority for Requirement: Iowa DNR Construction Permit 01-A-869 and 40 CFR 60 subpart RR

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 27 (T.O.)

Stack Diameter (inches): 44

Stack Exhaust Flow Rate (scfm): 11,000

Stack Temperature (°F): 85

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Authority for Requirement: Iowa DNR Construction Permit 01-A-869

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

8N Thermal Oxidizer Operation and Maintenance Plans

The 8N Thermal Oxidizer shall be operated and maintained according to this section and according to the plant's Standard Operating Procedure (SOP) MA-0300. SOPs MA-0300 may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the 8N Thermal Oxidizer system.

Monitoring Guidelines

The O&M Plan will set forth indicator ranges for the combustion temperature of the TO. The facility will continuously monitor the combustion temperature while the TO is operating. Corrective action will be initiated within 8 hours, if there is an excursion of the combustion temperature from the ranges specified in the O&M plan. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not indicate a violation of an applicable requirement. If the corrective action measures indicate that there is a failure on the thermal oxidizer, and such failure has the effect of increasing emissions from the associated emission point, the facility will take action with response steps. This will occur within 8 hours of discovery of any failure of the thermal oxidizer, and these steps shall include a timetable for completion. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits, then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring

- Continuous monitoring of combustion temperature
- Corrective action will be taken immediately if the combustion temperature deviates from the manufacturer's specifications: 1730 degrees F (1780 – 50)
-

Record Keeping

- Time of operation of control equipment
- Down time of control equipment during periods of solvent coating on the connected process equipment
- Repair and preventative maintenance performed on the thermal oxidizer
- Monthly mass balances information for VOCs and criteria pollutants (this requirement is being met at the time of permit issuance through the computer “Emissions” program, which tracks the quantity of solvent associated with coating materials input to the coater, products, the quantity of solvent associated with products, the quantities of solvent recovered and lost in the system).

Inspections: Semi-Annually

- Perform preventative maintenance procedures on the damper, transmitters, and gas train according to the criteria stated in MA-0300.

Inspections: Annual

- The mechanical and other systems of the thermal oxidizer shall be inspected annually according to the criteria stated in MA-0300.

Preventative Maintenance

- The plant shall continue to operate its formal program of preventative maintenance as needed to ensure proper operation of the thermal oxidizer.
- Relevant preventative maintenance activities are listed in MA-0300.
- Individual procedures may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the thermal oxidizer.

Quality Assurance/Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications or 3M defined specifications in accordance with good air pollution control practices.

Emission Point ID Number: 004-088 (Dual stack with 004-081)

Associated Equipment

Associated Emission Unit ID Numbers : 8N Enclose

Applicable Requirements

Emission Unit vented through this Emission Point: 8N Enclose

Emission Unit Description: Coater

Raw Material/Fuel: Adhesive

Rated Capacity: 170 lb./minute

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 30 TPY^(1, 2), 0.2 lb./lb. solids applied^(2, 3)

Authority for Requirement: Iowa DNR Construction Permit 01-A-841

⁽¹⁾ Emission rate used in original permit to make the original project (Project Number 92-253) a “synthetic minor” for the purposes of PSD. This is the total for emission units permitted under permit numbers 92-A-653-S4, 92-A-652-S4, 95-A-290-S1, 01-A-839, 01-A-840, 01-A-841, and 01-A-869. This limit also includes emissions from EP 004-088.

⁽²⁾ EP 004-081, covered under IDNR Construction Permit # 01-A-841, was supplemented with stack, 004-088. The original stack and then the installation of 004-088 were completed under a construction permit exemption letter from Clark Ott, March 12, 1996. Roughly 95% of the emissions exhaust through 004-088 and 5% through 004-081.

⁽³⁾ See also NSPS 40 CFR 60 subpart RR, 40 CFR §60.442(a)(1).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The entire 8N line is subject to the NSPS subpart RR because all of the processes (8N-1 through 8N-6) are located between the wind and rewind reels. NSPS subpart RR applies for all stacks within 8N line.

The permittee is responsible for ensuring that this entire coating operation follow all of the regulations specified in 40 CFR 60 subpart RR. See conditions listed under:

"NSPS Requirements" beginning on page 10 of this permit

All records and calculations must be satisfactory for demonstrating compliance with permit conditions and all conditions of 40 CFR 60 subpart RR.

Authority for Requirement: 40 CFR 60 subpart RR

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-118**Associated Equipment**

Associated Emission Unit ID Numbers : Die Clean E, Die Clean W

Applicable Requirements

Emission Unit vented through this Emission Point: Die Clean E

Emission Unit Description: Die Cleaning Tank

Raw Material/Fuel: MEK

Rated Capacity: 75 gallons

Emission Unit vented through this Emission Point: Die Clean W

Emission Unit Description: Die Cleaning Tank

Raw Material/Fuel: MEK and Heptane

Rated Capacity: 150 gallons

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 3.5 TPY

Authority for Requirement: Iowa DNR Construction Permit 95-A-457

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

A. Total combined solvent consumption for the two tanks and one table contributing to this source is limited to 1000 gallons per year.

B. The density of the solvent used shall not exceed 7.0 pounds per gallon.

Records shall be kept on-site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

A. Total combined solvent consumption, in gallons, for the three units contributing to this source, recorded on a monthly basis and calculated as a 12-month rolling average. Consumption shall mean only the amount of solvent added to the units to maintain solvent levels needed for operation. This amount will equal the amount lost to evaporation.

B. The density of each solvent used, in pounds per gallon.

Authority for Requirement: Iowa DNR Construction Permit 95-A-457

Emission Point Characteristics

This emission point shall conform to the specifications listed below

Stack Height (feet): 30

Stack Diameter (inches): 22

Stack Exhaust Flow Rate (scfm): 5,000

Stack Temperature (°F): 70

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 95-A-457

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 004-120

Associated Equipment

Associated Emission Unit ID Numbers : 04-1NAM-A-05

Applicable Requirements

Emission Unit vented through this Emission Point: 04-1NAM-A-05

Emission Unit Description: Tank (900 gallons)

Raw Material/Fuel: Adhesive

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No applicable emission limits at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner. The records shall show the following:

- A. A copy of the Material Safety Data Sheet (MSDS) of all materials stored in the tank.

Authority for Requirement: Iowa DNR Construction Permit 00-A-824

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 15.5

Stack Diameter (inches): 2

Stack Exhaust Flow Rate (scfm): Displacement

Stack Temperature (°F): 70

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 00-A-824

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 005-008

Associated Equipment

Associated Emission Unit ID Numbers : Resin Dumper
Emissions Control Equipment ID Number: RM4DC
Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: Resin Dumper
Emission Unit Description: Resin Dumper
Raw Material/Fuel: Resin
Rated Capacity: 8000 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
Iowa DNR Construction Permit 76-A-271

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 005-018**Associated Equipment**

Associated Emission Unit ID Numbers : Mch 01, Mch 02, COMPD Dumpster, Extruder
Emissions Control Equipment ID Number: Mill DC
Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: Mch 01

Emission Unit Description: Rubber Milling

Raw Material/Fuel: rubber, resin

Rated Capacity: 400 lb./hr.

Emission Unit vented through this Emission Point: Mch 02

Emission Unit Description: Rubber Mixing

Raw Material/Fuel: rubber, powder

Rated Capacity: 4740 lb./hr.

Emission Unit vented through this Emission Point: COMPD Dumpster

Emission Unit Description: Trash Dumpster

Raw Material/Fuel: general trash

Rated Capacity: 42 cubic yards

Emission Unit vented through this Emission Point: Extruder

Emission Unit Description: Extruding

Raw Material/Fuel: rubber/powder/resin

Rated Capacity: 4740 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 76-A-269

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 005-028

Associated Equipment

Associated Emission Unit ID Numbers : Mch 09
Emissions Control Equipment ID Number: SBS PM DC
Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: Mch 09
Emission Unit Description: Powder Mixer
Raw Material/Fuel: Powder
Rated Capacity: 1575 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr/dscf, 0.13 lb./hr.
Authority for Requirement: Iowa DNR Construction Permit 93-A-364

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

The stack height shall be a minimum of 44 feet above the ground.
Authority for Requirement: Iowa DNR Construction Permit 93-A-364

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 005-034

Associated Equipment

Associated Emission Unit ID Numbers : Mch 02
Emissions Control Equipment ID Number: Ban DC
Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: Mch 02
Emission Unit Description: Rubber Mixing
Raw Material/Fuel: rubber/powders
Rated Capacity: 4740 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: 567 IAC 23.3(14)
Iowa DNR Construction Permit 76-A-270

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 007-001**Associated Equipment**

Associated Emission Unit ID Numbers : 1ND2, 2NAD1, and 2NAD2

Emissions Control Equipment ID Number: SITO

Emissions Control Equipment Description: Thermal Oxidizer

Applicable Requirements

Emission Unit vented through this Emission Point: 1ND2

Emission Unit Description: Coater

Raw Material/Fuel: coating

Rated Capacity: 360 lb./hr.

Emission Unit vented through this Emission Point: 2NAD1

Emission Unit Description: Dryer

Raw Material/Fuel: coating

Rated Capacity: 282 KCF/hr

Emission Unit vented through this Emission Point: 2NAD2

Emission Unit Description: Dryer

Raw Material/Fuel: coating

Rated Capacity: 282 KCF/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): Total VOC emissions from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004 shall not exceed 2000 tons per rolling twelve month period.

Authority for Requirement: Iowa DNR Construction Permits 90-A-152S, 90-A-153S, 90-A-154S, and 567 IAC 22.108(3)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Emissions from the bypass shall be calculated and included in the total permitted allowable of 2000 tons per rolling twelve month period. Any exceedance of the allowable emission rate shall be reported to the Department within 8 hours or at the start of the first working day following the onset of an incident.

Record keeping:

Record all bypass periods including the date, time, and duration of the bypass.

Records shall be kept on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall contain data sufficient to demonstrate compliance with the VOC emission limit of 2000 tons per rolling twelve month period from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001

Authority for Requirement: 567 IAC 22.108(3)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: VOC

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Recuperative Thermal Oxidizer (SITO) Operation and Maintenance Plans

The Recuperative Thermal Oxidizer (SITO) shall be operated and maintained according to this section and according to the plant's Standard Operating Procedure (SOP) MA-0140. SOP MA-0140 may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the Recuperative Thermal Oxidizer (SITO) system.

Monitoring Guidelines

The O&M Plan will set forth indicator ranges for the combustion temperature of the SITO. The facility will continuously monitor the combustion temperature while the SITO is operating. Corrective action will be initiated within 8 hours, if there is an excursion of the combustion temperature from the ranges specified in the O&M plan. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not indicate a violation of an applicable requirement. If the corrective action measures indicate that there is a failure on the thermal oxidizer, and such failure has the effect of increasing emissions from the associated emission point, the facility will take action with response steps. This will occur within 8 hours of discovery of any failure of the thermal oxidizer, and these steps shall include a timetable for completion. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits, then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a

schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring

- Continuous monitoring of combustion temperature
- Corrective action will be taken immediately if the combustion temperature deviates from the manufacturer's specifications:
 - Low temperature – 1200° F
 - High temperature – 1475° F

Record Keeping

- Time of operation of control equipment
- Down time of control equipment during periods of solvent coating on the connected process equipment
- Repair and preventative maintenance performed on the thermal oxidizer
- Monthly mass balances information for VOCs and criteria pollutants (this requirement is being met at the time of permit issuance through the computer “Emissions” program, which tracks the quantity of solvent associated with coating materials input to the coater, products, the quantity of solvent associated with products, the quantities of solvent recovered and lost in the system).

Inspections: Semi-Annually

- Perform preventative maintenance procedures for the SITO transmitters, damper, and gas valve according to the criteria stated in MA-0140.

Inspections: Annual

- The mechanical and other systems of the thermal oxidizer shall be inspected annually according to the criteria stated in MA-0140.

Preventative Maintenance

- The plant shall continue to operate its formal program of preventative maintenance as needed to ensure proper operation of the thermal oxidizer.
- Relevant preventative maintenance activities are listed in MA-0140.
- Individual procedures may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the thermal oxidizer.

Quality Assurance/Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications or 3M defined specifications in accordance with good air pollution control practices.

Emission Point ID Number: 007-004**Associated Equipment**

Associated Emission Unit ID Numbers : 2NBO, 2NBD, 5N01, 5N02, and FI

Emissions Control Equipment ID Number: FI

Emissions Control Equipment Description: Fume Incinerator

Applicable Requirements

Emission Unit vented through this Emission Point: 2NBO

Emission Unit Description: Dryer

Raw Material/Fuel: coating

Rated Capacity: 2280 KCF/hr

Emission Unit vented through this Emission Point: 2NBD

Emission Unit Description: Dryer

Raw Material/Fuel: coating

Rated Capacity: 520 KCF/hr

Emission Unit vented through this Emission Point: 5N01

Emission Unit Description: Dryer

Raw Material/Fuel: coating

Rated Capacity: 720 KCF/hr

Emission Unit vented through this Emission Point: 5N02

Emission Unit Description: Dryer

Raw Material/Fuel: coating

Rated Capacity: 720 KCF/hr

Emission Unit vented through this Emission Point: FI

Emission Unit Description: Fume Incinerator

Raw Material/Fuel: natural gas

Rated Capacity: 90 KCF/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): Total VOC emissions from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004 shall not exceed 2000 tons per rolling twelve month period.

Authority for Requirement: Iowa DNR Construction Permits 90-A-152S, 90-A-153S, 90-A-154S, and 567 IAC 22.108(3)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Emissions from the bypass shall be calculated and included in the total permitted allowable of 2000 tons per rolling twelve month period. Any exceedance of the allowable emission rate shall be reported to the Department within 8 hours or at the start of the first working day following the onset of an incident.

Record keeping:

Record all bypass periods including the date, time, and duration of the bypass.

Records shall be kept on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall contain data sufficient to demonstrate compliance with the VOC emission limit of 2000 tons per rolling twelve month period from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004.

Authority for Requirement: 567 IAC 22.108(3)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: VOC

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Fume Incinerator (FI) Operation and Maintenance Plan

The Fume Incinerator shall be operated and maintained according to this section and according to Standard Operating Procedure (SOP) MA-0139 at the plant. SOP MA-0139 may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the fume incinerator system.

Monitoring Guidelines

The O&M Plan will set forth indicator ranges for the combustion temperature of the FI. The facility will continuously monitor the combustion temperature while the FI is operating. Corrective action will be initiated within 8 hours, if there is an excursion of the combustion temperature from the ranges specified in the O&M plan. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not indicate a violation of an applicable requirement. If the corrective action measures indicate that there is a failure on the thermal oxidizer, and such failure has the effect of increasing emissions from the associated

emission point, the facility will take action with response steps. This will occur within 8 hours of discovery of any failure of the thermal oxidizer, and these steps shall include a timetable for completion. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits, then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring

- Continuous monitoring of combustion temperature
- Corrective action will be taken immediately if the combustion temperature deviates from the manufacturer's specifications.
-

Record Keeping

- Down time of fume incinerator during periods of solvent coating on the connected process equipment
- Repair and preventative maintenance performed on the fume incinerator system
- Basis for mass balances for VOCs and criteria pollutants (this requirement is being met at the time of permit issuance through the computer "Emissions" program, which tracks the quantity of solvent associated with coating materials input to the coater, products, the quantity of solvent associated with products, the quantities of solvent recovered and lost in the system).

Inspections: Weekly

- Burner -- the burner shall be inspected visually at least one time per week according to the criteria stated in MA-0139.

Inspections: Quarterly

- The mechanical and other systems of the incinerator shall be inspected quarterly according to the criteria stated in MA-0139

Inspections: Annual

- The mechanical and other systems incinerator shall be inspected annually according to the criteria stated in MA-0139

Preventative Maintenance

- The plant shall continue to operate its formal program of preventative maintenance as needed to ensure proper operation of the fume incinerator.
- Relevant preventative maintenance activities are listed in MA-0139.
- Individual procedures may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the fume incinerator system.

Quality Assurance/Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications or 3M defined specifications, in accordance with good air pollution control practices.

Emission Point ID Number: 007-030**Associated Equipment**

Associated Emission Unit ID Numbers : Boiler 1

Applicable Requirements

Emission Unit vented through this Emission Point: Boiler 1

Emission Unit Description: Boiler

Raw Material/Fuel: No. 6 Fuel Oil and Natural Gas

Rated Capacity: 72 MMBtu/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limits: 0.8 lb./MMBtu (only boiler in operation)

Multiple Units Limits: Boilers 1, 2, & 3 fired: 0.38 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Iowa DNR Construction Permit 76-A-181S

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards: If this unit exceeds 240 hours/year of operation while burning fuel oil, a stack test and opacity observations will be required by the Department.

Reporting & Recordkeeping: The facility shall keep records on a 12-month rolling average to demonstrate the number of hours this unit is operated on fuel oil.

Authority for Requirement: 567 IAC 22.108(14)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 007-031**Associated Equipment**

Associated Emission Unit ID Numbers: Boiler 2

Applicable Requirements

Emission Unit vented through this Emission Point: Boiler 2

Emission Unit Description: Boiler

Raw Material/Fuel: No. 6 Fuel Oil and Natural Gas

Rated Capacity: 72 MMBtu/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limits: 0.8 lb./MMBtu (only boiler in operation)

Multiple Units Limits: Boilers 1, 2, & 3 fired: 0.38 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Iowa DNR Construction Permit 76-A-182S

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards: If this unit exceeds 240 hours/year of operation while burning fuel oil, a stack test and opacity observations will be required by the Department.

Reporting & Recordkeeping: The facility shall keep records on a 12-month rolling average to demonstrate the number of hours this unit is operated on fuel oil.

Authority for Requirement: 567 IAC 22.108(14)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 007-032**Associated Equipment**

Associated Emission Unit ID Numbers : GEN 007

Applicable Requirements

Emission Unit vented through this Emission Point: GEN 007

Emission Unit Description: Emergency Generator

Raw Material/Fuel: Fuel Oil

Rated Capacity: 469 HP

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 99-A-606

⁽¹⁾Visible emissions in excess of 25% opacity are observed other than during start-up, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Iowa DNR Construction Permit 99-A-606

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"

Iowa DNR Construction Permit 99-A-606

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

This emission unit shall combust number 2 fuel oil with a sulfur content that does not exceed 0.5 percent.

The facility shall monitor the percent of sulfur in the fuel as delivered to accurately track the SO_x emissions. The amount of fuel purchased and the sulfur content shall be used to calculate the overall sulfur content of all the fuel as combusted on a rolling twelve month average. The sulfur

content shall be used to calculate the actual SO_x emissions. The sulfur content can be vendor supplied or facility generated.

The generator is limited to operating a maximum of 500 hours per rolling 12-month period.

The facility is required to do routine maintenance on the generator according to manufacturer's specifications.

Authority for Requirement: Iowa DNR Construction Permit 99-A-606 and 567 IAC 23.3(3)

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 36

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (acfm): 350

Stack Temperature (°F): 600

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 99-A-606

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 007-059

Associated Equipment

Associated Emission Unit ID Numbers: Boiler 3

Applicable Requirements

Emission Unit vented through this Emission Point: Boiler 3

Emission Unit Description: Boiler

Raw Material/Fuel: Solvent Laden Air and Natural Gas

Rated Capacity: 144 MMBtu/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limits: 0.8 lb./MMBtu (only boiler in operation)

Multiple Units Limits: Boilers 1, 2, & 3 fired: 0.38 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Iowa DNR Construction Permit 90-A-152-S

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv, except as provided in 567 IAC Chapter 23.3(3) "e"

Authority for Requirement: 567 IAC 23.3(3)"e"

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 008-002

Associated Equipment

Associated Emission Unit ID Numbers: GEN 008

Applicable Requirements

Emission Unit vented through this Emission Point: GEN 008

Emission Unit Description: Pumphouse Emergency Firewater Engine

Raw Material/Fuel: fuel oil

Rated Capacity: 340 Hp

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %, except as provided in 567 Chapter 24 or 567 Chapter 23.3(2)"d"

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

This emission unit shall combust number 1 (or number 2) fuel oil with a sulfur content that does not exceed 0.5 percent.

The facility shall monitor the percent of sulfur in the fuel as delivered to accurately track the SO_x emissions. The amount of fuel purchased and the sulfur content shall be used to calculate the overall sulfur content of all the fuel as combusted on a rolling twelve month average. The sulfur content shall be used to calculate the actual SO_x emissions. The sulfur content can be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 23.3(3)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 010-013

Associated Equipment

Associated Emission Unit ID Numbers : Tank 13

Applicable Requirements

Emission Unit vented through this Emission Point: Tank 13

Emission Unit Description: Tank

Raw Material/Fuel: Solvent

Rated Capacity: 11,000 gallons

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 0.05 lb./hr., 0.22 TPY

Authority for Requirement: Iowa DNR Construction Permit 94-A-451-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput: The capacity of this tank shall not exceed 15,000 gallons, working losses.

The tank will be used to store a mixture of heptane, methyl ethyl ketone, toluene, isopropyl alcohol, and methyl isobutyl ketone.

Hours of operation: The source is limited to 4160 hours per year operation, working losses.

Reporting & Recordkeeping:

- Records shall be kept on a rolling monthly average to verify that the operating limits are met by this source.
- The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel administered under DNR permit 94-A-451-S1. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: Iowa DNR Construction Permit 94-A-451-S1

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Emission Point Characteristics

The emission source shall be constructed as detailed in the application. The source is to be connected to the stack detailed below.

Source No.: Storage Tank

Stack Height (above grade): 17.7 ft

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (scfm): None

Stack Temperature (°F): 51

Location: Tank Farm; 600 ft. North of Godfrey Lane, 550 ft. East of Western Property Boundary

Equipment Capacity: 15,000 gallons

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

The source shall be identified by permanent labels both in the plant and at the emission point on the roof. The permit holder shall submit to the Department a scaled drawing of the plant showing the rooftop locations of all emission points, labeled with Department permit number.

Authority for Requirement: Iowa DNR Construction Permit 94-A-451-S1

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 010-018**Associated Equipment**

Associated Emission Unit ID Numbers : Tank 18

Emission Control Equipment ID Number: TNK18DC

Emission Control Equipment Description: Torit Dust Collector

Applicable Requirements

Emission Unit vented through this Emission Point: Tank 18

Emission Unit Description: Storage Tank

Raw Material/Fuel: Inorganic Material

Rated Capacity: 1 MM lb/yr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 99-A-224

⁽¹⁾If an opacity measurement exceeds the indicator opacity (25%) this facility should promptly investigate this source and make corrections. However, if after corrections are made the opacity continues to exceed the indicator opacity the Department may require a demonstration of compliance with mass emission limits, i.e. stack tests.

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 99-A-224

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters: Maintain Donaldson Torit Dust Collector according to manufacturers specifications and maintenance schedule.

Reporting & Recordkeeping: All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits.

Records shall be kept on-site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

Record on a monthly basis, all maintenance of Donaldson Torit Dust Collector.

Authority for Requirement: Iowa DNR Construction Permit 99-A-224

Emission Point Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 50

Stack Diameter (inches): 10

Stack Exhaust Flow Rate (scfm): 100

Stack Temperature (°F): Ambient

Authority for Requirement: Iowa DNR Construction Permit 99-A-224

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 019-002

Associated Equipment

Associated Emission Unit ID Numbers : 7NS1

Applicable Requirements

Emission Unit vented through this Emission Point: 7NS1

Emission Unit Description: Coater

Raw Material/Fuel: Coating

Rated Capacity: 67.2 KCF/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 5%

Authority for Requirement: Iowa DNR Construction Permit 94-A-167

Pollutant: VOC

Emission Limit(s): 1.75 lb./hr., 7.67 TPY

Authority for Requirement: Iowa DNR Construction Permit 94-A-167

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:

A) The owner or operator must comply with at least one of the following standards:

1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.

All records shall be satisfactory for demonstrating compliance with all applicable operating limits.

- A) The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B) The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
1. Quantity of each solvent (VOC) and solid used in this coating line.
 2. All calculations performed.

Authority for Requirement: 40 CFR 60 Subpart RR

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Visible Emission Monitoring:

The facility shall observe the exhaust stack for visible emissions monthly during a period when the emission unit on this emission point is in normal operation and record the observation. The records of visible emissions shall be maintained for five years. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to make observations throughout the day. If all observation attempts for a month have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. If visible emissions are observed, this would be a permit excursion, not a violation, but corrective action must still be taken as soon as possible, but no later than eight hours from the observation of visible emissions.

Maintain a written record of each observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(3)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 019-003**Associated Equipment**

Associated Emission Unit ID Numbers : 7NC

Applicable Requirements

Emission Unit vented through this Emission Point: 7NC

Emission Unit Description: Coater

Raw Material/Fuel: Coating

Rated Capacity: 10 gal/min

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No applicable emission limits at this time other than the NSPS requirements below.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:

- A) The owner or operator must comply with at least one of the following standards:

1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.

All records shall be satisfactory for demonstrating compliance with all applicable operating limits.

- A) The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B) The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
 1. Quantity of each solvent (VOC) and solid used in this coating line.
 2. All calculations performed.

Authority for Requirement: 40 CFR 60 Subpart RR

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 019-004

Associated Equipment

Associated Emission Unit ID Numbers : 7NC

Applicable Requirements

Emission Unit vented through this Emission Point: 7NC

Emission Unit Description: Coater

Raw Material/Fuel: Coating

Rated Capacity: 10 gal/min

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No applicable emission limits at this time other than the NSPS requirements below.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:

- A) The owner or operator must comply with at least one of the following standards:

1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.

All records shall be satisfactory for demonstrating compliance with all applicable operating limits.

- A) The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B) The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
 1. Quantity of each solvent (VOC) and solid used in this coating line.
 2. All calculations performed.

Authority for Requirement: 40 CFR 60 Subpart RR

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 019-005

Associated Equipment

Associated Emission Unit ID Numbers : 7NC

Applicable Requirements

Emission Unit vented through this Emission Point: 7NC

Emission Unit Description: Coater

Raw Material/Fuel: Coating

Rated Capacity: 10 gal/min

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No applicable emission limits at this time other than the NSPS requirements below.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:

- A) The owner or operator must comply with at least one of the following standards:

1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.

All records shall be satisfactory for demonstrating compliance with all applicable operating limits.

- A) The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B) The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
 1. Quantity of each solvent (VOC) and solid used in this coating line.
 2. All calculations performed.

Authority for Requirement: 40 CFR 60 Subpart RR

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 019-008

Associated Equipment

Associated Emission Unit ID Numbers : 14JCT

Applicable Requirements

Emission Unit vented through this Emission Point: 14JCT

Emission Unit Description: Corona Treater

Raw Material/Fuel: Electricity applied to the film

Rated Capacity: 25 KW/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Ozone

Emission Limit(s): 0.718 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 90-A-364

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

No limits apply at this time.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 019-012**Associated Equipment**

Associated Emission Unit ID Numbers : 7NDL1

Applicable Requirements

Emission Unit vented through this Emission Point: 7NDL1

Emission Unit Description: Delaminator

Raw Material/Fuel: Acrylic Acid

Rated Capacity: 60 ft/min

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 5 %

Authority for Requirement: Iowa DNR Construction Permit 94-A-166

Pollutant: VOC

Emission Limit(s): 1.46 lb./hr., 6.45 TPY

Authority for Requirement: Iowa DNR Construction Permit 94-A-166

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure

Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:

- A) The owner or operator must comply with at least one of the following standards:
 - 1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
 - 3. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.

All records shall be satisfactory for demonstrating compliance with all applicable operating limits.

- A) The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B) The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
 - 1. Quantity of each solvent (VOC) and solid used in this coating line.
 - 2. All calculations performed.

Authority for Requirement: 40 CFR 60 Subpart RR

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Visible Emission Monitoring:

The facility shall observe the exhaust stack for visible emissions monthly during a period when the emission unit on this emission point is in normal operation and record the observation. The records of visible emissions shall be maintained for five years. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to make observations throughout the day. If all observation attempts for a month have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. If visible emissions are observed, this would be a permit excursion, not a violation, but corrective action must still be taken as soon as possible, but no later than eight hours from the observation of visible emissions.

Maintain a written record of each observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(3)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 019-013**Associated Equipment**

Associated Emission Unit ID Numbers : 7NDM

Applicable Requirements

Emission Unit vented through this Emission Point: 7NDM

Emission Unit Description: 7N Drum Pump and Mixing

Raw Material/Fuel: Adhesives

Rated Capacity: 6.85 gal/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No applicable requirements per Iowa DNR Construction Permit 93-A-366 and 367, other than the NSPS requirements below.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

The owner or operator is responsible for ensuring that the entire coating operation follows all of the regulations specified in 40 CFR part 60, Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. These conditions include, but are not limited to:

- A) The owner or operator must comply with at least one of the following standards:

1. Obtain a 90% actual reduction of VOCs calculated over one calendar month.
2. The standard of 0.2 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month.

All records shall be satisfactory for demonstrating compliance with all applicable operating limits.

- A) The owner or operator must calculate a weighted average of the mass of solvents used in this coating line, per mass of coating solids applied in this operation, as outlined in 40 CFR 60.443a.
- B) The following records must be kept as specified in 40 CFR 60.445. All required quantities must also be averaged on a rolling monthly basis.
 1. Quantity of each solvent (VOC) and solid used in this coating line.
 2. All calculations performed.

Authority for Requirement: 40 CFR 60 Subpart RR

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 019-065

Associated Equipment

Associated Emission Unit ID Numbers : 13JCT

Applicable Requirements

Emission Unit vented through this Emission Point: 13JCT
Emission Unit Description: Multiple Head Corona Treater
Raw Material/Fuel: Electricity applied to the film
Rated Capacity: 2- 10 KW treaters

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No applicable requirements per Iowa DNR Construction Permit 98-A-1164-S1.

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 47

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 3,240

Stack Temperature (°F): 70

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-1164-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 022-001

Associated Equipment

Associated Emission Unit ID Numbers : AATNK

Applicable Requirements

Emission Unit vented through this Emission Point: AATNK

Emission Unit Description: Tank

Raw Material/Fuel: Acrylic Acid

Rated Capacity: 37.7 gal/hr

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No applicable emission limits at this time other than the NSPS requirements below.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The permit holder shall maintain records on the premises to show the dimensions and the capacity of the storage vessel. Records shall be maintained for the life of the vessel and available for inspection upon request by representatives of the Department.

Authority for Requirement: 40 CFR 60 Subpart Kb

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 024-003**Associated Equipment**

Associated Emission Unit ID Numbers : 1NO

Emissions Control Equipment ID Number: SRU

Emissions Control Equipment Description: Solvent Recovery Unit

Applicable Requirements

Emission Unit vented through this Emission Point: 1NO

Emission Unit Description: Drying/Coating

Raw Material/Fuel: Coating

Rated Capacity: 2,283 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): Total VOC emissions from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004 shall not exceed 2000 tons per rolling twelve month period.

Authority for Requirement: Iowa DNR Construction Permits 90-A-152S, 90-A-153S, 90-A-154S, and 567 IAC 22.108(3)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Emissions from the bypass shall be calculated and included in the total permitted allowable of 2000 tons per rolling twelve month period. Any exceedance of the allowable emission rate shall be reported to the Department within 8 hours or at the start of the first working day following the onset of an incident.

Record keeping:

Record all bypass periods including the date, time, and duration of the bypass.

Records shall be kept on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall contain data sufficient to demonstrate compliance with the VOC emission limit of 2000 tons per rolling twelve month period from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 024-003, and 024-004.

Authority for Requirement: 567 IAC 22.108(3)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: VOC

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Solvent Recovery Unit (SRU) Operation and Maintenance Plans

The Solvent Recovery Unit (SRU) shall be operated and maintained according to this section and according to the plant's Standard Operating Procedure (SOP) MA-0141. SOP MA-0141 may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the Solvent Recovery Unit (SRU) system.

Monitoring Guidelines

The O&M Plan will set forth indicator ranges for the combustion temperature of the SRU. The facility will continuously monitor the combustion temperature while the SRU is operating. Corrective action will be initiated within 8 hours, if there is an excursion of the combustion temperature from the ranges specified in the O&M plan. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not indicate a violation of an applicable requirement. If the corrective action measures indicate that there is a failure on the thermal oxidizer, and such failure has the effect of increasing emissions from the associated emission point, the facility will take action with response steps. This will occur within 8 hours of discovery of any failure of the thermal oxidizer, and these steps shall include a timetable for completion. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits, then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Record Keeping

- Time of operation of control equipment
- Down time of control equipment during periods of solvent coating on the connected process equipment
- Repair and preventative maintenance performed on the solvent recovery unit
- Monthly mass balances information for VOCs and criteria pollutants (this requirement is being met at the time of permit issuance through the computer "Emissions" program, which tracks the quantity of solvent associated with coating

materials input to the coater, products, the quantity of solvent associated with products, the quantities of solvent recovered and lost in the system).

Inspections: 8 week

- The pre-filters and filters shall be inspected according to MA-0141

Inspections: Semi-Annually

- Perform preventative maintenance procedures for the SLA damper, belts, valves, conservation vents, flame arrestor, and limit switches according to the criteria stated in MA-0141.

Inspections: Annual

- The mechanical and other systems of the solvent recovery unit shall be inspected annually according to the criteria stated in MA-0141.

Preventative Maintenance

- The plant shall continue to operate its formal program of preventative maintenance as needed to ensure proper operation of the solvent recovery unit.
- Relevant preventative maintenance activities are listed in MA-0141.
- Individual procedures may be revised without modification of this permit so long as such revision provides an equal or improved level of preventative maintenance of the thermal oxidizer.

Quality Assurance/Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications or 3M defined specifications in accordance with good air pollution control practices.

Emission Point ID Number: 024-004

Associated Equipment

Associated Emission Unit ID Numbers : 1NO

Emissions Control Equipment ID Number: SRU

Emissions Control Equipment Description: Solvent Recovery Unit

Applicable Requirements

Emission Unit vented through this Emission Point: 1NO

Emission Unit Description: Drying/Coating

Raw Material/Fuel: Coating

Rated Capacity: 2,283 lb./hr.

Emission Limits (lb./hr., gr/dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): Total VOC emissions from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 007-004, 024-003, and 024-004 shall not exceed 2000 tons per rolling twelve month period.

Authority for Requirement: Iowa DNR Construction Permits 90-A-152S, 90-A-153S, 90-A-154S, and 567 IAC 22.108(3)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Emissions from the bypass shall be calculated and included in the total permitted allowable of 2000 tons per rolling twelve month period. Any exceedance of the allowable emission rate shall be reported to the Department within 8 hours or at the start of the first working day following the onset of an incident.

Record keeping:

Record all bypass periods including the date, time, and duration of the bypass.

Records shall be kept on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall contain data sufficient to demonstrate compliance with the VOC emission limit of 2000 tons per rolling twelve month period from emission points 004-005, 004-006, 004-012 (excluding emission unit 6ND), 007-001, 024-003, and 024-004.

Authority for Requirement: 567 IAC 22.108(3)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Refer to Emission Point 024-003 for the Solvent Recovery Unit Operation and Maintenance Plan.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

IV. Emission Points Without Specific Conditions

The following emission units do not have any specific emissions limits, therefore periodic monitoring is not required. The emission units are grandfathered from construction permitting until a modification takes place. The owner/operator shall comply with all applicable requirements that become effective during the permit term.

Emission Point ID	Emission Unit ID	Description	Raw Material/Fuel	Rated Capacity
003-003	Poly 1	Reactor 1	Acrylic Acid and Monomers	5 gal/min
	Poly 2	Reactor 2	Acrylic Acid and Monomers	5 gal/min
003-020	Poly 1	Reactor 1	Acrylic Acid and Monomers	5 gal/min
	Poly 2	Reactor 2	Acrylic Acid and Monomers	5 gal/min
003-051	Poly 1	Reactor 1	Acrylic Acid and Monomers	5 gal/min
	Poly 2	Reactor 2	Acrylic Acid and Monomers	5 gal/min
004-004	1NS1	Coater	Coating	360 lb./hr.
	1ND1	Dryer	Coating	168 KCF/hr
004-007 (Fugitive)	2NAS1	Coater	Coating	25 lb./hr.
	2NAS2	Coater	Coating	420 lb./hr.
	2NAS3	Coater	Coating	420 lb./hr.
004-008 (Fugitive, Bldg 4)	1NS1	Coater	Coating	79 lb./hr.
	1NS2	Coater	Coating	303 lb./hr.
	1NS3	Coater	Coating	1688 lb./hr.
	2NBS1	Coater	Coating	1300 lb./hr.
	2NBS2	Coater	Coating	1300 lb./hr.
	5NS1	Coater	Coating	200 lb./hr.
	5NS2A	Coater	Coating	200 lb./hr.
	5NS2B	Coater	Coating	200 lb./hr.
	6NS1	Coater	Coating	113 lb./hr.
	8NS1	Coater	Coating	170 lb/min
	Tank 11	Storage Tank	Coating	
004-013	5NCT	Corona Treater	Electrical Energy applied to the film	5 KW
004-015	6NS2	Coater	Coating	210 KCF/hr
004-017	6NCT	Corona Treater	Electrical Energy applied to film	5 KW
004-018	1NADH	Hold Tank	Adhesive	100 gallons
	5N Tank 1	Mix Tank	MEK	165 gallons
	5N Tank 2	Mix Tank	Ethyl Acetate	165 gallons
	5N Tank 3	Mix Tank	Toluene	35 gallons
	D9N	Drum	Coating Solutions	55 gallons
	FC3	Mixing Tank	Solvent Solutions	100 gallons
	FC4	Mixing Tanks	Solvent Solutions	100 gallons
	DB3&4	Mix Tank	Coating	259 gallons
	SI1	Mixing Tank	Solvent Solutions	100 gallons
	SI2	Mixing Tank	Solvent Solutions	100 gallons
	IPA	Tank	Isopropyl Alcohol	330 gallons

Emission Point ID	Emission Unit ID	Description	Raw Material/Fuel	Rated Capacity
004-029	2NBS3	Coater & Die Cleaner Machine Exhaust	Coating	11.88 KCF/hr
004-031	6NCHAMBER	Oven Exhaust	Coating	113 lb/min
004-034 (Bypass)	6NCHAMBER	Oven exhaust	Coating	113 lb/min
004-047	6NSEQUR	Web Seal Exhaust	Coating	113 lb/min
004-085	2NBADH	Storage Tank	Adhesive	180 gal/hr
005-007	CR1DM	Mixing	Solvents	20 gal/hr
005-014	CR3 3S	Blending	Adhesive	375 gal/hr
005-045	CR2 2S	Mixer	Solvent/ Rubber/ Resin	375 gal/hr
005-046	CR2 2N	Mixer	Solvent/ Rubber/ Resin	375 gal/hr
005-047	CR1MT1	Mixer	Solvent/ Resin	90 gal/hr
005-048	CR1MT2	Mixer	Solvent/ Resin	90 gal/hr
005-049	CR1HT1	Hold Tank	Solvent	90 gal/hr
005-050	CR1HT2	Hold Tank	Solvent	90 gal/hr
010-001	Tank 1	Tank	Solvent	30,000 gals.
010-002	Tank 2	Tank	Solvent	30,000 gals.
010-003	Tank 3	Tank	Solvent	30,000 gals.
010-004	Tank 4	Tank	Solvent	30,000 gals.
010-005	Tank 5	Tank	Solvent	30,000 gals.
010-006	Tank 6	Tank	Solvent	30,000 gals.
010-007	Tank 7	Tank	Solvent	30,000 gals.
010-008	Tank 8	Tank	Solvent	30,000 gals.
010-011	Tank 11	Tank	Solvent	4,000 gals.
010-012	Tank 12	Tank	Solvent	4,000 gals.
019-006	13JE	Extruder Machine	Plastic/ Resin	2000 lb./hr.
019-007	14JE	Extruder Machine	Plastic/ Resin	2000 lb./hr.
019-033	Core Tank 1	Tank	Adhesives	142.7 gal/hr
	Core Tank 2	Tank	Adhesives	142.7 gal/hr

V. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"3.*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of

why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5).*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.

2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.

3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.

- a. Form 1.0 "Facility Identification";
- b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
- c. Form 5.0 "Title V annual emissions summary/fee"; and
- d. Part 3 "Application certification."

4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:

- a. Form 1.0 "Facility Identification";
- b. Form 5.0 "Title V annual emissions summary/fee";
- c. Part 3 "Application certification."

5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.

6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.

7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records for the 8N, 9N, and SITO thermal oxidizer combustion temperature monitors or any other continuous monitoring instrumentation that is added during the term of this permit, and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.

- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12), 567 IAC 25.1(5)*

G11. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G12. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in *567 IAC 131.2(2), 567 IAC Chapter 131-State Only*

G13. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from *547 IAC Chapter 24.1(4)* may be available as provided for in Iowa Code Section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. **Oral Reporting of Excess Emissions.** An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. **Written Reporting of Excess Emissions.** A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

3. **Emergency Defense for Excess Emissions.** For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G14. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G12 and G13). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G15. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G16. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
 - d. The changes are not subject to any requirement under Title IV of the Act.
 - e. The changes comply with all applicable requirements.
 - f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

- i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.
- 567 IAC 22.110.(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110.(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110.(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110.(4)*

5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103.(2)*

6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108 (11)*

G17. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do any of the following:

- i. Correct typographical errors
- ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- iii. Require more frequent monitoring or reporting by the permittee; or
- iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility,

coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.

iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.

ii. The permittee's suggested draft permit

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22 107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113

The permittee shall submit an application for a significant permit modification at least 6 months prior to the date of the proposed modification. 567 IAC 22.105(1)a(4)

G18. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), or to meet the parameters established in 22.1(1)(c), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 567 IAC 22.1(1)

G19. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. 567 IAC 23.1(3)"a", and 567 IAC 23.2

G20. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. 567 IAC 23.2 *except* 23.2(3)"h"; 567 IAC 23.2(3)"h" - *State Only*

G21. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedances of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G22. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G23. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

- b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 20, 1996.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
- a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G24. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

- 1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
- 2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
- 4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108 (18)*

G25. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8)

G26. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9)"d"

G27. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. 567 IAC 22.111 (1)"d"

G28. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. 567 IAC 22.3(3)"c"

G29. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G30. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G31. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(319) 927-2640

Field Office 2

P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6

1004 W. Madison
Washington, IA 52353
(319) 653-2135

Polk County Public Health Dept.

Air Quality Division
5895 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.

Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

1998 NOV 13 4

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

POLICY/PROCEDURE STATEMENT

TOPIC: <u>Opacity Limits</u>

Policy Procedure Number: 3-b-08

Replaces Number: None

Date:

Effective Date: November 12, 1998

Preparer: David Phelps

Reviewer:

Approval: **Bureau Chief:** Peter Hamlin

Date: 11/12/98

Division Administrator: Allan Stokes

Date: 11/12/98

Applicable Code of Iowa or Iowa Administrative Code Rule: 23.3(2)d

“No person shall allow, cause or permit the emission of visible air contaminants into the atmosphere from any equipment, internal combustion engine, premise fire, open fire or stack, equal to or in excess of 40 percent opacity or that level specified in a construction permit, except as provided below and in 567-Chapter 24.”

REASON OR BACKGROUND

The default opacity limit allowed by regulation is 40%. This limit was established with the original regulations in 1970. It is generally accepted that opacity greater than 40% was evidence of a mass emission standard exceedence. More recently, there have been requests from facilities for limits much lower than that allowed by the regulations, in some cases less than 0.01 gr/scf to which a 40% opacity limit does not correspond. Since opacity is used as an indicator of the particulate emission rate, listing an indicated potential problem opacity that is more in line with the mass emission rate is useful. In order to have the authority to set limits lower than 40%, subrule 23.3(2)d was changed. This change allows the department the ability to set opacity limits at a level that more closely corresponds to what would be observed by the source when operating in compliance with its mass emission rate.

Except in the case where a specific opacity limit is established by rule, it has been the general policy of the Department not to take action on opacity limits directly. Rather, if it is felt that a violation of the mass emission rate exists that is not attributable to some abnormal event, a stack test would be required to verify compliance. However, the Department reserves the right to use the results of formal opacity readings as evidence of an exceedence.

DETAILS

It shall be the policy of the Department to list the default opacity as a permit condition and in addition an indicator opacity may be listed.

For ease of proving continual compliance a source may request a 'no visible emissions' opacity limit which allows proof of compliance without having a certified opacity reading taken. In this case any visible emissions would be an exceedence.

The IDNR permit writer may list an opacity that will be a indicator of possible mass emission rate exceedence. If the permittee wishes, the recommended indicator opacity may be changed by demonstrating compliance with the mass emission rate during a stack test while emitting the new desired indicator opacity. If the tested mass emission rate is less than the permitted emission rate, then the desired indicator opacity may be set at a proportionally higher level than observed during the stack test.

If an opacity measurement, taken in accordance with an approved reference method for opacity, (generally USEPA Method 9 or 22) exceeds the indicator opacity then the facility will promptly investigate the source and make corrections. However, if after corrections are made the opacity continues to exceed the indicator opacity the Department may require additional proof to demonstrate compliance with the mass emissions limits.

Recommended indicator opacities shall be:

Grain Loading gr./scf	Recommended Indicator Opacity
<0.01 gr./scf	non specified in permit *
0.01 to 0.06 gr./scf	10% Opacity
0.061 to 0.08 gr./scf	20% Opacity
0.081 to 0.1 gr./scf	25% Opacity

* A line is added to the permit that states: "If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard."

If a source is a batch process the indicator opacity shall be based on the table above, but the opacity averaging period, for comparison to the indicator opacity, shall be the entire batch cycle. For purposes of comparison the indicator opacity readings shall be taken during the entire cycle and averaged.

Sources are also given the opportunity to set source specific limits to be coordinated with the initial compliance test. These may then be incorporated into the permit.

In all cases an exceedence of the indicator opacity will require the permittee to file an "indicator opacity exceedence report" to the IDNR regional office. The reporting requirements shall be:

Oral report of excess indicator opacity. An incident of excess indicator opacity (other than an incident of excess indicator opacity during a period of startup, shutdown, or cleaning) shall be reported to the appropriate regional office of the department within eight hours of, or at the start of the first working day following the onset of the of the incident. The reporting exemption for an incident of excess indicator opacity during startup and shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in subrule 25.1(6).

An oral report of excess indicator opacity is not required for a source with operational continuous monitoring equipment (as specified in subrule 25.1(1) if the incident of excess indicator opacity continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity.

The oral report may be made in person or by telephone and shall include as a minimum the following:

- a) The identity of the equipment or source operation from which the excess indicator opacity originated and the associated stack or emission point.
- b) The estimated quantity of the excess indicator opacity.
- c) The time and expected duration of the excess indicator opacity.
- d) The cause of the excess indicator opacity.
- e) The steps being taken to remedy the excess indicator opacity.
- f) The steps being taken to limit the excess indicator opacity in the interim period.

Written report of excess indicator opacity. A written report of an incident of excess indicator opacity shall be submitted as a follow-up to all required oral reports to the department within seven (7) days of the onset of the upset condition, and shall include as a minimum the following:

- a) The identity of the equipment or source operation point from which the excess emission originate and the associated stack or emission point.
- b) The estimated quantity of the excess indicator opacity.
- c) The time and duration of the excess indicator opacity.
- d) The cause of the excess indicator opacity.
- e) The steps that were taken to remedy and to prevent the recurrence of the incident of excess indicator opacity.
- f) The steps that were taken to limit the excess indicator opacity.
- g) If the owner claims that the excess indicator opacity was due to malfunction, documentation to support this claim.

Exceptions to this policy:

- 1) In the case where a facility has an opacity limit established in an existing permit, no change will be made to that permit limit unless the permit is being modified for other purposes.
- 2) If the facility has a continuous opacity monitor, this policy shall not apply.
- 3) This policy shall not apply to opacity limits established in Prevention of Significant Deterioration (PSD) permits or permits that were established for maintenance plans for nonattainment areas.
- 4) This policy shall not apply where an opacity limit is established as an indication of hazardous air pollutants.

- 5) This policy shall not apply where an opacity limit is established by a rule, New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPS), etc.